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Prizes for the Most-Helpful Articles

N order to ascertain from what our readers get the most help and what they like best, we have decided to offer a number of prizes, amounting to a total of \$50 for each issue. The names of the prize-winners are to be determined by our readers themselves, by popular vote.

The first prize is to go to the author of the article, note or item published in this issue of Clinical Medicine which the largest number of our readers shall pronounce the most practically useful; the subject discussed may be surgical, medical or obstetrical, but it must deal with treatment. The matter of length is not to be considered at all; the primary consideration is *practical value*.

The second prize will go to the author receiving the second largest number of votes; the third, to the next on the list, and so on. The first prize will be \$25 cash; the second, \$15; the third, fourth and fifth, smaller amounts, possibly payable in books or other articles of value.

Members of the staff of CLINICAL MEDICINE, including Drs. Abbott, Waugh, Burdick, Achard, Epstein, Butler, Candler, will be barred from the competition. Please do not vote for them.

We want to know what you like. We also want to stimulate our readers to become contributors, not because we lack for material, but because we are anxious to give a maximum of the kind of material that our readers generally desire. We also wish to stimulate everyone to a closer reading of these pages.

Go through every page of this number and send in your vote at once. Vote for your first choice, or for five, in order of choice, as you prefer. You may write on a post-card if more convenient to you. If, as we expect, this test proves satisfactory, the prizes will be continued from month to month.

PREVENTIVE MEDICINE

THERE be three sorts of men as to the attitude they assume toward a proposed innovation.

1. Those to whom life is but a dull affair, a "demnition grind," welcome anything for a change, just because it is a change. To them agitation is the beginning of wisdom, contentment is sloth, and the gloss is off the new as speedily as the brilliancy of molten lead fades as it begins to cool. They are young, these modern Athenians, hence radical.

2. Others are well satisfied with the things that are and want no change. Their wealth of knowledge, opinions, beliefs, gear, has been earned by hard struggle in the battle of life. Dearly bought, it is dearly held, and they resent its undervaluing and the disturbance of secure possession. They are aging, hence conservative.

3. Nor old nor young, the enthusiasm of youth past, the mind still receptive, the solid substratum of the race receives, with question, yet receives; hears both sides and judges; takes no sides until the evidence is in, and controls the rashness of the one, arouses the other from sloth. Ready to learn, though demanding proof, willing to join the movement for the betterment of the race, but first asking if it be indeed a betterment.

It is obvious that a society, to prosper and progress, must contain all three elements; that each is a necessity to the other. One must be cautioned that the newest is not necessarily the best; the other must realize that it is the horse that pulls the wagon, while the brakes never lift a pound; the third will have no cause to judge unless there are plaintiff and defendant.

Now, doctor, we'll just proceed to classify you, by placing before you this proposition, to change the financial relations of our profession with the public to something more in harmony with modern conditions. Inherited from the days when the sick were brought to the temple, treated by the priest and tendered a testimonial of their gratitude, a voluntary honorarium, this pre- and most un-Christian ideal still

exists in spirit, and sufficiently in fact to place us in this preposterous attitude.

Our charges are made when the patient is disabled, by sickness, from earning the money to pay us. The longer his illness, the larger our bill and the less his likelihood of paying. Illness resulting in death leaves us without recompense, except from previous earnings, and these by no means always available. Every effort we make to prevent illness leads towards our own starvation. The net result is that the profession as a body is desperately hard up, and is driven to turn its attention to outside means of getting support or to graft.

Turn to the picture presented by the plan suggested, that of level payments by the patient, in the nature of an insurance against disease. Let the doctor limit himself to the care of 500 persons, each of whom pays him a stated sum monthly-10 to 25 cents to the beginner, rising each two years to 50 cents, 75 cents and \$1.00. For this he looks after their health, seeing each patient twice a month, looks into the sanitary conditions of house and vicinity, personal habits, notes disease tendencies or causes that may lead to disease, and advises concerning them; attends those who get sick, and seeks to prevent the spread of infection; does the medical, surgical, obstetric, and specialty work needed, unless in case where still higher special aid is required.

The advantages:

1. The doctor has a sure and adequate income, rising as his value increases, well within the patients' ability to pay.

2. The doctor becomes a practical sanitarium, and his success in preventing disease renders his work easier without cutting off his own livelihood.

3. The doctor is a better all-around physician, taking that comprehensive view of the patient that is lost by the specialist. The doctor learns to study each patient as an individual, to recognize the coming of disease in time to prevent it, or to catch it in the earlier stages when it is easier to manage. We should not have eye-treatment spoiled by fecal toxemia, nor should we have brilliantly successful operations,

when the patient dies of other ailments than that for which he was operated.

4. The advantages to the patient lie in the above—the prevention or early cure of disease, maintenance of working ability, security against sickness, expenses so crushing as to be unbearable, or his reduction to the pauper class with charity service; the study of him as a human being, and the skilled advice that leads to health, usefulness, and longevity.

5. To the community it is of advantage that every doctor becomes a personally interested sanitarian, seeking to ferret out and end the causes of disease; lessening the burdens of the community in the care of the helpless, and increasing the public wealth by keeping the producer at work.

Incidentally, it puts a quietus on the silly talk of overcrowding the profession, by setting every idle member to work, showing that the apparent surplus is merely due to our neglect to fulfil the duties we ought to assume. For the doctor who undertakes the direction of 500 persons has no spare time. He should see each at least twice a month, at home or workshop, making 1000 visits, or 40 for each day, allowing 25 working days in the month. Then he has to see to those who may be ill, do medical, surgical, obstetric, gynecologic, pediatric, geriatric, orthopedic, proctologic, ophthalmologic, otologic, rhinologic, neurologic, psychologic, and other stunts, test and remedy hygienic conditions about the premises, wake up the authorities as to defective matters in streets, alleys, water, gas, schools, etc., do his laboratory testings, studying, recording, and keep up with the times by visits to the centers of medical learning. Really, do you believe he will have much idle time? Can he do all this the way it should be done, for 500 persons?

By this plan, doctor, patient and community are brought into perfect accord and harmony of interests along the most approved lines of modern development.

Some results: It has long been known that certain diseases are transmitted only by infected feces, sputa, urine, flies, fleas, mosquitoes, food; that in each case such infections may be prevented by measures

known to us. Let every doctor comprehend that it is his duty and interest to have the preventive measures effectively carried out, and in a few years these maladies will have been eradicated.

A few years ago it was found that there was a direct relation between the prevalence of cancer and the use of certain forms of food. Does every doctor know this, and inculcate its importance upon his patients? Or do the German practicians of Chicago still allow 25 percent of their German-born fellow citizens over 40 years of age to die of cancer?

Lastly—is it also least?—this plan would abolish "graft" in medical practice. If you read "Artemas Quibble," in *The Saturday Evening Post*, you will have been struck by the statement, "The criminal lawyer first scares his patient thoroughly, then ascertains how much money he has, then gets it." Please, it is the lawyers who do this—not the doctors! Were there any grafters in medicine who pursued this course, they naturally would oppose energetically this suggested readjustment of our relations with the public. It would be grossly unjust to assume that all who oppose it were of this class.

Having presented the plan, it is up to you to discuss it, and present the arguments, pro and con.

To make an easy job difficult—put it off as long as you can.—Silent Partner.

THE PERSONAL SIDE OF THE DOCTOR'S LIFE

I.—THE DOCTOR'S CLOTHES

Costly thy habit as thy purse can buy, But not expressed in fancy; rich, not gaudy; For the apparel oft proclaims the man.

In one of his latest detective stories Dr. Conan Doyle introduces his hero, Sherlock Holmes, in the act of examining an old, battered felt hat. Through his skill in inductive reasoning, just from that hat, he was able to reach the conclusion that the wearer was a man of high intellectual capacity; that within two years he had been well to do, but now was in straightened circumstances; that he was close-shaven and used a certain kind of "lime

dressing" on his hair; that he lived in a house which was not supplied with gas; and that he had degenerated morally, and probably had fallen into habits of drink.

There are few who can analyze character from an examination of a cast-off garment, yet nearly everyone of us, consciously or unconsciously, is influenced in his opinion of the man he meets by the clothing they wear, and how they wear it. It is equally true that others will be influenced in their opinions of us in exactly the same way. Since success is the result of many complex factors, no ambitious man, desirous of working his way from rung to rung upward on the ladder of life, can afford to neglect any single point which may contribute to the ends toward which he aims, no matter how inconsequential it may seem. There is not the slightest doubt that a dirty collar has turned the tide from success back toward failure; and that uncleaned fingernails have been the nails in the coffin of many a pretty ambition.

A man's tastes in clothing inevitably reflect his tastes in what we are pleased to call the "higher life." An exact man of quiet tastes, who revels in figures and glories in details, who gets his literary pleasures from Jane Austen and his wildest excitement from a game of checkers, could no more be happy in a pair of heavy box-toed shoes, with a bright-green tie, trousers bagging at the knees and a fancy vest, than a loud-voiced, bumptious sporty individual would be satisfied without showy apparel, as varied in hue as the garments of Joseph.

The doctor may well, therefore, give some play to his individuality in the choice of his garments, though, if his taste be poor, he should consult his good wife, and temper his tastes according to her advice. But there are certain canons which he should always respect, for since "the garment oft proclaims the man," the physician, of all men, must see to it that it proclaims him the kind of man that people can respect.

Get clothing that fits. If you are one of the few of the Adonis forms who can wear "ready made," well and good—you are in luck; but the average man will do better to have his clothing made for him by a good tailor. The cost is only slightly more,

and if the suit is well cared for it will last enough longer to pay the slight additional expense.

Select fabrics of good quality. Americanmade woolens which are cheap as well as serviceable are now available, so that the material is not necessarily expensive.

Avoid extremes of fashion—indeed, avoid extremes of all kinds in dress. The professional man should in everything appear the man of culture, and men of that stamp should avoid slouchiness on one hand and mere showiness on the other.

Don't choose gaudy colors. The passerby will look at the gaudy garment and form his estimate without hesitation, and if he looks at your face at all, it will only be to criticise. Dress "up to your good qualities," away "from your bad ones," whether physical or mental. You want people to know the best that's in you.

Cultivate habits of good taste. Learn what it is. Take lessons from your tailor and haberdasher, and get the ideas of men and women who know when things are right. A fat man who picks out a loosely woven fabric which bags at the knees before his trousers are a week old, or selects a coarse, brightly colored plaid which makes his waist line look twice as large, or anyone with large feet who buys a pair of tan, white, red or other conspicuous shoes, needs a private course in esthetics. People who do not know what that word means will be quick to perceive that the doctor has poor taste, whether he has good sense or not.

The slim man should avoid the "up and down" stripes, the fat man those that "run around," the red-faced man should avoid red ties, the big-headed man either very large or very small hats, and the short man a bob-tail coat or a low hat.

Keep your clothing well pressed. Every little town now boasts its tailor and its cleaner, and if yours should not be supplied, then do this work yourself. Ten minutes twice a week will suffice, and the time thus spent will pay better dividends than any mining stock with which I am at present acquainted.

There is one unpardonable sin in dress. Uncleanliness can never be forgiven or

condoned. Even if your clothing be threadbare and of last year's pattern, you can at least be neat. Keep your clothing well brushed, free from specks or spots, unstained by drugs or secretions, and unscented with the odors of the stable or the pharmacyeven with those of the perfumer. Your hat should be kept brushed, your shoes shined, and your handkerchief should ever be as clean as your hands, and they should be as clean as soap and water can make them.

Are these things inconsequential? As compared with the acquisition of knowledge of our art and the ability to use that knowledge with skill and intelligence, they are. But in no other respect. Life is a composite thing. It takes more than ability, more than enthusiasm, more than self-faith, more than work to make it a success. It takes all these things, plus tact, plus personality, plus the many little things that serve to impress our characters, our good qualities, even our existence, upon the minds The man who is determined of others. to go to the front will leave none of these "little" things unstudied. A man's personal appearance in hundreds of instances has been a factor for or against his employment. Your first duty is to get the chance you are looking for; then it's up to you to make good. How can you rail at fate if you cast aside as "inconsequential" the opportunity that even now may be knocking at your door?

The test of character, the measure of backbone, is the ability to say "No."—William C. Hunter.

HOW THE PATENT-MEDICINE MEN **GET CUSTOMERS**

There has recently come into our hands a circular sent out by a house which advertises itself as being "the largest medicallist house in the world." It supplies its patrons with the names of persons afflicted with all kinds of ailments.

Here is the list of diseases, for each of which this firm professes to be able to give the names of from 1000 to 50,000 sufferers:

Intestinal complaints, rheumatism, constipation, dyspepsia, nervous debility, female troubles, obesity, facial blemishes, piles, skin diseases, neuralgia, catarrh, bronchitis, asthma, blood poison, bust developer, consumption, drunkenness, eczema, epilepsy, hair diseases, heart diseases, morphine, paralysis, syphilis, stomach troubles, kidney complaints, and "all kindred ailments."

There is an extra charge for lists of people suffering from cancer, rupture or deafness. While ordinary diseases are rated at only \$5 per 1000 names, these aristocratic morbidities cost the inquirer four times as much, or \$20 per 1000 addresses. Presumably lists of people who are thus afflicted are four times as valuable as the ordinary kind to these medical harpies.

The scheme is that the patent-medicine man or the quack doctor who gets one of these lists can use it for personal solicitation through "follow-up letters," and, by preying upon the fears, ignorance and gullibility of these poor, sick devils, the quack will be enabled to bleed them of every available dollar. Thus we are informed that these medical lists are "absolute fortune-producers." No doubt they are!

Here are some of the people who use these medical lists, so we are informed:

Dr. F. E. Greene Sterling Remedy Company World's Dispensary Medical Association Dr. L. R. Williams Riker Drug Corporation

ical Company

I. S. Johnson & Co. Dr. Hartman, Peruna Drug Manufacturing Company Standard Oil Company The Hegeman Corporation Lydia E. Pinkham Med- Munyon Remedy Company

Scan this list of names carefully. Note that the Standard Oil Company rubs shoulders with Peruna, and that the Riker Drug Corporation, which is the owner and promoter of one of the big chains of drugstores in the East, hobnobs on friendly terms with Munyon of the uplifted hand, and dear old Mrs. Pinkham, "the woman's friend."

They are harpies, all of them, and we cannot even except our old friend, Standard Oil, which, it seems, is extending its tentacles out into the patent-medicine field, as it has into the retail drug business, evidently determined to let no opportunity for profit, no chance to grasp the unwary dollar, go untried.

Doctors who are intent upon defending their own interests do not want to forget that there is such a thing as the patent-medicine octopus. The fact that this grasping and unclean business has been getting something of a "black eye" of recent years, through the pages of such magazines as Collier's and Ladies' Home Journal, should not mislead any physician into the belief that the devil-fish is dead. He is not dead; he has simply changed his tactics. Watch him, brother doctor, and wherever you see signs of renewed activity, just get busy.

Keep on dreamin', it won't hurt y';
Let the world know you don't care,
Though the wild winds rage an' ruin
All your castles of the air.
Sing your song—if it's a sad one,
Better sing it mighty low,
But if there is sunshine in it
Lift your voice and let us know.
— John N. Beffel.

SKEPTICISM BRED BY SPECIALISM

In The Toledo Medical and Surgical Reporter, Beverley Robinson discusses skepticism in the use of drugs. He says that drugs as usually given frequently increase the functional disturbances they are intended to correct. Further, pathologic conditions cannot always be detected during life and made the basis of drug-treatment. And to this he attributes the fact that many good remedies once in vogue are no longer employed, and yet unquestionably have value.

Dr. Robinson illustrates by speaking favorably of blood-letting, done to relieve a burdened heart and to open the way for the action of drugs. He believes also in the use of the same remedy at the initial stage of pleuritis or even of appendicitis. Furthermore, for old adhesions, repeated blistering or cauterization should not be ignored.

How can we rid the public of the skepticism proceeding from false teaching? We answer, only by abolishing quackery and fraud. And this end can be reached solely through constant honest teaching and honest practice. The patient should place himself in the hands of the wise, conservative physician of unblemished character, inasmuch as the family physician knows the whole man, but the specialist only a part, and the part can never be disassociated from the whole altogether without probable resulting injury.

This latter statement should be taken in connection with an interesting editorial by Dr. Parkhurst which recently appeared in Hearst's Examiner. The latter says that specialization contracts the area of a man's efforts and compels him to travel in a narrow road; his steps are monotonous and his prospect is limited. He compares the specialist to the man who runs a country store in distinction to one who heads a department in a city store. The work of the latter might be done by a slot-machine. A knowledge of the detail is acquired by the specialist, but minute knowledge produces a minute man. One who spends ten hours a day pointing needles himself becomes exceedingly sharp in that particular chore, but looking at small things makes one small. Watch cleaners usually grow short-sighted. Governor Wilson of New Jersey applies the same principle to the legal profession.

The difficulty is that the specialist is unaware of his limitations. Knowing his department so thoroughly that he is enabled to instruct anybody outside the same, he is unconscious of the fact that his ignorance about the rest of the body seriously diminishes his efficiency in his own specialty.

It all comes back to the same old thing: the powers of the human intellect are limited, and what is gained by concentration in one direction is lost in another.

The term "medical profession" ought to be divided, the therapeutic sleepers, iconoclasts, naughts, cowards and mugmumps should be classed as the non-medical profession.—Bulletin-Journal of Animal Therapy.

THE UNFIT

Sinclair has written a paper on the unfit that is worth considering. He describes six classes, as seen in the following:

First: The always-tired. The detection of hookworm has lifted the stigma from a section of our country, by showing that the southern cracker had a good reason for his leisurely ways. Brunton goes further, and Sinclair agrees with him, in the connection between inertia and fecal toxemia.

The depressing influence of these toxins rests upon muscle-fiber and nerve-cell.

Second: As to the feeble-minded, Sinclair declares there is a direct connection between weak intellects and unbridled sexual impulse. The degenerate's family averages seven children where the normal family numbers but four. While this may be relatively true, it is also true that the greatest men have invariably been men of strong sexual passion, so strong, in truth, as to overcome law and all other considerations. Scarcely a great leader of men can be named of whom this is not true. Since, then, the great and the lowly, the conqueror and the degenerate, are alike susceptible to the woman's charms, the inference is clear. But the preponderance of posterity to the unfit is not well. Two remedies are possible, namely, the development of the weak, and the limitation of their offspring. The latter can and should be applied in the case of the criminal and insane; and this would be no small advance in sociology and in eugenics.

Third: To the epileptic this applies as well. Sterilization may be advocated here, especially as such persons are extremely liable to sexual crime when temporarily deranged. Sinclair urges that the marriage of epileptics should be legally prohibited, but this is folly. How shall the law refuse to any person the one legitimate exercise of his functions?

Fourth: To the criminal, sterilization is a welcome boon. He wants no children and, as a rule, assents to the operation without objection. But the vital question of the disposal of the exconvict after his first term, so that he shall not be forced into the habitual criminal class, needs especial attention.

Fifth: The inebriate. Here we run upon that principle of the law that is otherwise expressed in the legal maxim of caveat emptor. Law seeks to regulate, not to direct, the activities of men. It does not seek to compel men to morality, or truth, or justice. Otherwise we might burn our statute books and take the Golden Rule as the one only standard, judging all human actions thereby. Someone has said that men are wolves, and the law merely prescribes the

rules under which they may prey upon each other. The law recognizes the inebriate's (legal) right to ruin himself and his family, if he so chooses. Too close regulation, too much interference with individual liberty is unwise. Men must not lose the sense of free will or of responsibility. They must look after themselves, or suffer the consequences.

But society would be the better if the hopeless inebriate were placed under restraint. Yes, but how accomplish this without opening the door to cruelty, to deprivation of liberty and property, under this plea? It would be a perilous experiment in legislation.

Nothing lubricates the machinery of endeavor like that oil of gladness, expressed warm, hearty, honest praise.—A. S. B.

"THERAPEUTIC DELUSIONS"

Blest is the man who knows what he knows, and knows that he knows it; but the man who assumes that the little he thinks he knows is the eternal Alltruth, is—not blest.

Now, Dr. Henry Farrell of Nebraska doesn't know very much about therapeutics, but he has been reading; and finding some pessimistic smart sayings in the writings of Schmiedeberg and of some other pharmacologists who mistakenly think they are therapeutists, Dr. Farrell copies out a lot of their twaddle and fires it into the Republican Valley Medical Association.

It's a curious commingling of half-truths assumed to be whole truths, of true premises and unwarranted deductions. The test tube is the thing! Anything done in the laboratory is all, and can be applied to the human being without disturbing the equipoise of a bacillus. That intangible, imponderable, untestable thing called vitality is not taken into consideration. How easy it is to establish your case if you ignore all the arguments on the other side. But it's a matter to be bewailed that so few of the men who have been teaching therapeutics in the colleges all these years, and presumably know nothing by themselves, should neglect to accept the dicta of the eminent council, and quit.

So our parrot repeats his lesson made in Germany: Alcohol doesn't stimulate; ether hypos are no good in shock or collapse, nor is nitroglycerin; colchicum only disturbs the digestion; dyspeptic tablets are —wow! Viburnum isn't mentioned by Hare, Cushny or Wood, as to its therapeutic value, "therefore" (we quote verbatim) "we conclude, and rightly, that it has none." That is surely "going some." Unless these three worthy folk deign to mention a drug, it is worthless. Talk about hero-worship!

How about new things—would they be worthless until the immortal three voiced approval, and immediately after it would take on therapeutic worth? Suppose we were giving a patient the new drug, with no effect at all, until July 31, at 3 p. m., when Dr. Hare completes his study and concludes the drug is good—at once it begins to exert its powers—is that it? And how about those others—Brunton, Murrell, Liebreich, Nothnagel, to say nothing of our own Osborne, Butler, Sollmann, and even the mighty Council? Only the Three have the divine gift of imparting efficacy to drugs by the stamp of their approval.

Funny, but one of the three, Prof. Hare, has but recently placed the stamp of his hearty disapproval on this whole presentation of Dr. Farrell's originals, emphatically protesting against the judgment of drugs by pharmacologists, and quoting with dissent the very examples Farrell men-

tions.

Other tried and trusted remedies meet similar condemnation. Sir James Y. Simpson was mistaken in attributing to cerium oxalate the power of sedating an irritated stomach; valerian is worthless in hysteria; olive oil doesn't relieve the pain of gallstones, the patient only thinks so while taking it; phosphorus and the hypophosphites do not cure. We get lecithin in our food, so can not be benefited by taking it as a medicine; and as that applies to iron, lime, soda, potassa, sulphur, oxygen, fat, and many other agents used as drugs, their uselessness goes as a matter of course. Certainly the intestinal antiseptics couldn't suit Dr. Farrell, although at least fifty thousand American doctors could enlighten him. Chromium sulphate is his latest delusion.

He winds up with a paragraph that relegates to the demnition bowwows potassium chlorate, adrenalin, lithium salts, "ferric hydrate and magnesia in arsenic poisoning, calcium salts and tannic acid in internal hemorrhage, turpentine in phosphorus poisoning, sparteine sulphate as a heart stimulant." He must have forgotten poor old calomel. And then he ends with this astounding contradiction of his whole address: "One of the most important questions confronting the medical profession to day is that of rational and intelligent therapeutics."

This ought to have preceded the article, for it furnishes the key—the essay is a joke,

whether intentional or not.

Why don't people stick to the commonsense rules that govern the taking of evidence in a court of law? All a witness has to do is to tell what he knows—the truth, the whole truth, and nothing but the truth. Men like Farrell will persist in saying what they think, or think they know, or assume to be so, and they arrogate to themselves attributes no mortal ever has possessed or ever will possess. Had he said that he, himself, could do no good with the remedies condemned, we could have agreed with him. If he had gone further and had asserted that nobody else could get any good out of them, we should have protested against his assumption that his knowledge and skill comprised the sum total of all these attributes possessed by the entire medical profession. But when he goes so far as to declare that these remedies have no values at all, we see him assuming that his small store of knowledge comprises all the truth that exists, and that we concede to the Almighty alone. And we who have studied diligently all these long years and don't know very much yet, hide our diminished heads when we realize that this superhuman store of erudition has been gathered in the four brief years since Dr. Farrell stepped out of the Maryland Medical College with his diploma not yet dry.

The matter goes far beyond Dr. Farrell and reaches to the experimental pharmacologists, who of late claim that therapeutic investigation ends with the test tube, ignoring the third testing, which is the most important of all, that upon human beings when affected by disease.

Tomorrow! What is it? A shadow we pursue and never overtake. It is there, and it is not. We reach and grasp it, and in our hand we hold today. A beacon to ambition; a crutch for the idle to lean upon; the mother of fear; the cave of uncertainty; the refuge of the vanquished; the bank in which the idle store their hopes; the sword which conscience hangs above us; a fixture unattainable; a threat; a hope; a lure. Tomorrow! It is nowhere, save in the fool's calendar.

CYCLIC VOMITING AND FECAL INFECTION

In *The Lancet* for July 1, Mellanby describes a case of cyclic vomiting. The patient, a boy of six years, had thus suffered periodically nearly every month since his birth. The attacks lasted several days, with vomiting, great prostration, fever, and constipation. During this time his weight fell off about two pounds. The urine was scanty, on one day (being only an ounce), specific gravity 1035, containing acetone, and diacetic acid.

The cause is obscure and various explanations have been offered. Langmead sees in such cases intestinal toxins inducing fatty infiltration of the liver. Howe and Richards look to a shock deranging the nervous equilibrium and metabolism, with excretion of unoxidized products into the alimentary canal. They also note the appearance of indol in the urine during the paroxysms. Ewing blames the liver, with intestinal toxins. Comby sees in these cases chronic appendicitis. A. E. Roussel found in one case pyloric stenosis, and this points to the need of more careful examinations of the bowels.

It is admitted that cyclic vomiting depends on acidemia, and this Mellanby ascribes to intestinal toxins acting on the liver. He found his patient excreting much creatin during an attack, while a normal child excretes none. This child always excreted creatin; showing the cause to be always present, the disturbance occurring when the toxins accumulated. Since acetone appeared in the urine only after the attack was fully established, it seems that this substance is an effect rather than a

cause of the paroxysm. The acetone stopped when a supply of glucose was given to the child. As the acidosis subsided, so did the excretion of creatin, which was replaced by creatinin.

When carbohydrates were cut out of the diet, acetone and creatin appeared in the urine, but the child remained well, proving that acidosis was not the direct cause of the cyclic vomiting. Nor did the addition of fat to the diet determine an attack.

The conclusion reached from the study was that the attacks depended on some constantly active intoxication in the portal area. Bacterial infection was excluded by blood and urine cultures. The condition might depend on excess of betaimidazylethylamin formed in the intestinal wall.

Examination of many urines shows that all cases of acetonuria are accompanied by creatonuria, but the reverse is not true. The creatonuria of hepatic cancer is not associated with acidosis, unless the patient is starving.

The importance assigned to the presence of the acetone in diabetic coma is ludicrous. The failure of the alkali treatment, the diabetic's free acid excretion for years, without symptoms, the unchanged alkalinity of the blood-plasma in such patients, while in acidosis produced by acid ingestion the alkalinity increases, the occurrence of dyspneic coma in nondiabetic cases, and other points, can be urged against the direct causation of coma in diabetes by acids. The inability of the liver to use carbohydrates has not been enough considered.

Mellanby suggests that when severe symptoms accompany acidosis, and in diabetic coma, one most important factor is the absence of glycogen in the liver-cells, lessening its power of neutralizing toxins, and allowing the diffusion of intestinal toxins other than acids through the organ-The method of combating nonism. diabetic acidosis by glucose in large doses seems more scientific than giving alkalis. "Even if the causal connection between acidosis and diabetic coma is accepted, there can be but little doubt that the acidosis as such accompanying fever, gastroenteritis, delayed chloroform poisoning, cyclic vomiting, and many other conditions,

is never of symptomatic significance. The term acid-intoxication is here a misnomer." In the case of cylcic vomiting it had nothing whatever to do with the attacks.

Years ago we became impressed with the profound importance of the retention and reabsorption of fecal matter. We asked ourselves why, when a mere whiff of sewer gas was so deadly, a man could carry about inside his body pounds of this toxic matter, for weeks or months, with impunity? The answer is gradually shaping itself he can't! From every side investigations are leading current opinion to the position we took up clinically. Fecal matter is poisonous, and when retained in the bowel beyond the normal period, toxins form in it, are absorbed, and induce more disorders, physical, mental and moral, than are yet suspected.

Let any reader who feels the burden of life weigh heavily upon his spirits take pains to empty his bowels completely and absolutely, and note the sense of rejuvenation—the alert, light, happy keenness of intellect—the bouyancy—the fitness, that follows. Wouldn't you like to feel that way always?

The next and perhaps the greatest of the surgic fads is going to be the removal of the colon!

CONSISTENCY THOU ART A JEWEL!

JEWEL No. 5

The July number of *The California State Journal of Medicine* contains on its first page an editorial castigating the official journals of the state medical societies of Michigan, New Jersey, Kansas, South Carolina, Minnesota, Oklahoma and Ohio for the publication of advertisements of proprietary medicines not approved by the Council on Pharmacy and Chemistry of the American Medical Association.

Just two pages over, also in the editorial department of *The California State Journal of Medicine*, we find a laudatory editorial praising salvarsan, the new patented proprietary, newspaper-promoted specific for syphilis. Presumably this free "advertising" was donated.

So far as we know, salvarsan has not yet been officially recognized by the Council on Pharmacy and Chemistry.

Isn't she a "jewel"?

Bide your time and keep on plugging,
There's a goal for you to gain,
But the prize is not for people
Who would lag and yet complain.
Curb ambition when it's rampant,
Just maintain a steady jog,
For you've got to be a tadpole
E'er you grow to be a frog.
—St. Louis Star.

HELPS FROM "CLINICAL MEDICINE"—A HICCOUGH CURE

While one of our staff was traveling by train from San Francisco to Portland, after the meeting of the American Medical Association, he made the acquaintance of a gentleman who turned out to be a physician, and, like many other physicians, was an enthusiast about CLINICAL MEDICINE. He told this story:

"Do you know, I got one item out of the CLINIC a few years ago that gave me a peculiar reputation. One day I was talled to see a case of intractable hiccoughing. The patient had had two or three other doctors and none of them had succeeded in stopping it. I tried the usual things, and still that fellow went right on hiccoughing. What to do, I did not know. I ransacked my brains and then all at once it occurred to me that I had seen something in the CLINIC about stopping the hiccoughs. I went home and looked over the back numbers, and sure enough there it was. I thought I would try it, though I didn't have much faith. So I went back to the house of my patient and I did just as the CLINIC had told us to do, and sure enough the hiccoughing stopped like

"Well, everybody had heard about that case, and it wasn't long before I was called to see another one. I didn't suppose the scheme would work the second time, but it did, and that helped to advertise me. Before long I was a 'specialist' on hiccoughs. When called to a patient I would go into a room alone with him, and invariably I would stop it almost immediate-

ly. The other doctors could not understand it, and wanted to know what I did. "'Do you hypnotize them?' asked one of my professional friends. That simple idea, and it is only one of the many which I have gleaned from the pages of CLINICAL MEDICINE, has been worth hundreds, yes, thousands of dollars to me."

Every number of CLINICAL MEDICINE has suggestions of this kind, and every physician who does not read its pages carefully from beginning to end is making a mistake. However, I think some of you are wondering just what it was that this doctor used to stop hiccough. For their information let us reprint it here:

"Have the patient place his thumbs firmly in the ears and the middle finger of each hand upon the nares, so as to occlude both passages, then let him exhale all the air in his lungs, and while the lungs are collapsed, let him sip ten separate swallows from a cup of *cold* water held to his mouth by another person. As he takes the last swallow, let him release his nose and ears and take a deep inspiration."

This sounds very simple—so simple that many physicians will undoubtedly think it not worth trying. However, if you don't have faith, you can at least try it. Once in a while it may be necessary to repeat the procedure, but not often.

CURING ALCOHOLISM

In The Saturday Evening Post, Jack London has a story worth reading, and more. A wealthy young man is cursed with an insatiable thirst. The captain of a vessel navigating the South Seas, where London's recent tales (the fruit of his ill-fated cruise in the "Snark") are located, takes the "souse" with him, cuts off his liquor, restores his health by hard work, and when on the first opportunity the man indulges in a debauch the captain administers a sound thrashing. Then he sets the man to work again and keeps him at it, until time, abstinence, returning muscularity and manhood give him self-control.

How nice it reads, and what an ideal method of treatment! Who has ever treated one of these men but has fervently longed for just such a chance, to stand up before the fellow and, man to man, administer to him the jamdest licking a human being ever received? If ever a remedy was needed, it was just that, and how it would have worked! Just as a little means of emphasizing the solid truths one had been pouring into inattentive ears for hours, days, weeks, months.

If Jack London will get up a law placing the inebriate at the doctor's disposal in the manner depicted in that tale, we can promise him the enthusiastic support of every disciple of Esculap in the country.

A young medical student was being quizzed by one of his teachers: "In what will you specialize?" he was asked. "Disease of the nostril," replied the student. "Good," said the professor, enthusiastically. "Which nostril?"

TOAD VENOM A POWERFUL HEART REMEDY. THE REDEMPTION OF BUFO AGUA,

One of the compensations coming to age is that one learns not to be too sure. Knowledge is always relative, never absolute. The last word on any subject has never yet been spoken. The thing we hold up for "laughter, fleers and jeers" today may be the pride of progressing tomorrow.

If there's ever been one single respectful word written on Chinese medicine, it has escaped me. The concatenation of all that's filthy and absurd; without a redeeming trait, with not one solitary little contribution to medical science! Why, the almond-eyed Celestial carefully gathers up dead toads, dries them, reduces their skin to a powder, and administers it as medicine! Toads!

But our own learned predecessors used powdered dried toads as medicines for dropsies, and even as late as 1833 they received mention in standard works on pharmacology. Then came the period of questioning skepticism, and the use of toads was dropped as too preposterous for consideration. Follows the period of investigation, and two Johns Hopkins men, having nothing better to while away time, undertook to ascertain what there was, anyhow, in that ridiculous old superstition.

So Doctors Abel and Macht secured a supply of bufo agua from Jamaica, milked the secretion from his salivary glands, and subjected it to scientific tests.

The first result was the discovery that, if instilled into the eye, this toad venom quickly causes extreme constriction of the blood-vessels, blanching the conjunctiva. This was found to be due mainly to an epinephrin-body, partly due to a digitalis-body. No effect followed when a small dose of the stuff was taken into the stomach, unless it came in contact with the mouth, when profuse salivation occurred. Injected subcutaneously or intravenously, the digitalisprinciple is very toxic. When a large dose of the venom was injected, a tremendous rise of blood pressure was induced, followed immediately by a fall, due to sudden and complete stoppage of the heart. When a large dose in a capsule was swallowed by a dog, the stomach being empty, in ten minutes a clear bilious fluid was vomited, followed by retching and salivation for twenty minutes and manifest depression for an hour. This effect would have been caused by the epinephrin in the dose, if given alone. The crude venom is a powerful and rapid agglutinator for the red corpuscles of the rabbit.

Examination shows that the pressor principle, constituting about 5 percent of the venom, is identical with epinephrin, as derived from the suprarenals from higher animals, both chemically and therapeutically.

The efficacy of toad skin in dropsy is due to the digitalis principle, of which the venom contains about 35 percent. This may readily be isolated in the form of crystals and prisms. The effects resemble those of digitalis, but we are promised more definite details later.

The evidence presented shows that our benighted forerunners who gave dried toad for dropsies were correct in their observation, just as we who give the sulphocarbolates as intestinal antiseptics, cactin as a heart regulator, hyoscine in preference to scopolamine, and practice a thousand "unorthodox" things, because supported by clinical observers, are right, despite the inability of the professional high-brows,

sometimes, to give scientific reasons for success.

It isn't the size of a man's roll but the size of a man's soul that counts.—Herbert Kaufman.

KOLIPINSKI, AND NICKEL IN MEDICINE

Kolipinski, who introduced the sulphate of chromium to the American Therapeutic Society, has called the attention of that association of conglomerated mossbacks to the sulphate of nickel. (Monthly Cyclopedia, June, '11.)

Nickel is not a poison as used in cooking utensils.

Experiments on animals show the nickel salts, in toxic doses, to cause motor paralysis (centric) with convulsions, tetanic cramps, lowered blood pressure, twitching, and finally death, the respiration stopping before the heart. In less acute cases, an affection develops resembling mercurialism, with stomatitis, diarrhea, the feces black and offensive. Some resemblance is seen to the action of cobalt, but the color of the urine is unchanged. It is difficult to cause death with nickel given by the stomach. Nickel is mainly excreted by the kidneys, some in the bile and feces. All its salts are antiseptic, especially the chloride.

To plants, nickel is more toxic than cobalt. Manoilow found the salts less destructive than copper to microorganisms. It inhibited the growth of bacillus coli communis, in the strength of 95:10,000; typhoid bacillus, bacillus pyocyaneus, staphylococcus, and cholera vibrio, 30:10,000; aspergillus, 46:10,000; saccharomyces, 89:10,000; bacillus prodigiosus and subtilis, 70:10,000.

Sir James Y. Simpson found nickel a gentle metallic tonic in doses of one grain after meals. He gave it for periodic headache, chlorosis and amenorrhea. J. D. Palmer found the action to resemble that of bromides, relieving facial neuralgia and inducing sleep. Relief was more prompt than from morphine.

Da Costa gave the sulphate and bromide in doses of 1 to 3 grains. Larger doses caused nausea and giddiness, relaxing the pulse and lowering temperature. It was anodyne, not hypnotic or tonic, and proved useful in obstinate diarrheas. Of the bromide, five grains was an average; ten grains a full dose as to bromide action, relieving congestive headaches, convulsive states, epilepsy, etc.

Rosh Leaman found nickel bromide best for epilepsies with infrequent regular attacks, where a mild impression is to be

maintained for a long time.

Kolipinski chose the sulphate as affording nickel effects rather than those of the acid element. The dose he fixes at one grain four times a day, in pill, tablet or solution. The latter, 1:1900, proved a potent germicide and antiseptic. In 1- to 2-percent solution it cured impetigo contagiosa, pityriasis versicolor, ringworm, and eczema marginatum.

The patches of alopecia areata showed new hair in a week. It is a good application for acne, giving the remedy internally also if the patient is a young anemic. It is also good internally for urticaria from overwork, with nocturnal outbreaks, for the irritation of erythema and for chronic

psoriasis.

Chorea was cured by nickel within four weeks, the nutrition improving under the remedy without the unpleasantness of arsenic. Stammering improved after two months' treatment, the nutrition and morale showing benefit. Tic douloureux was eased by nickel. In all migraines, it proved one of the best remedies.

Chronic enteritis gave way to nickel in connection with dieting; also in tuberculous diarrheas it prevented relapses. In epilepsy, the sulphate proved useless, although Kolipinski tries hard to make out a case for it. But it proved of value in the emotional and psychic weakness, the vague ideation, the instability of character and action met with in celibates of both sexes. These are termed neurasthenics. Nickel relieves their insomnia, dyspepsia and irritability, restoring failing vigor.

Nickel is a sedative tonic of peculiar and elective power in obviating the effects of sexual abuse; the heart action being the index of the trouble. Spermatorrhea is

likewise benefited.

Dr. Kolipinski does not show a judicial attitude, but is trying to write up nickel.

His description of the effects of masturbation appears to have been copied from the advertisements of quacks. Despite his warm enconiums, we find no sufficient proof that nickel exerts any beneficial powers in itself. In diarrheas, it is like all other metals, somewhat astringent and antiseptic, but presenting no special advantages. In the diarrheas of the tuberculous—not necessarily or often tuberculous diarrheas—it does not approach in efficacy the copper salts. Most neuroses will show improvement after two or three months' care, even if nickel is not being given, provided the hygiene is judiciously regulated.

Nickel bromide is a good remedy, each grain equaling about 5 grains of potassium bromide. Apart from this, we are unable to see in the statement presented by Dr. Kolipinski anything to warrant a resort to the salts of nickel. In the sexual cases he dilates upon, there is no such radical and certain result from nickel as follows thymol-iodide applications to the prostatic urethra. In the neurotic conditions pertaining to celibacy, is there any reason in looking to a drug for relief, or for expecting any drug can beneficially aid in outraging nature? The remedy for celibacy and its

train of ills is matrimony.

A PENALTY FOR EFFICIENCY

A blacksmith or a carpenter who is more skilful and efficient than others asks and receives a greater wage than is paid to his inferiors. A salesman who sells more goods than other salesmen is rewarded

with an increased salary.

But the general practitioner whose knowledge and skill are so great that he cures his patients in half the time required by his less-gifted competitor gets only half as much remuneration as they receive. Often two visits suffice for him to overcome a condition that threatens to become serious, and he is paid for two visits only. Meanwhile friends and relatives see no cause for gratitude, for where the relief was so prompt they conclude there was "not much the matter."

But let a well-dressed incompetent take charge of such a case, and how different the tale. Day after day the visits, the discouraging headshakes and the dosing continues until, perhaps, after many days, the patient is well again, though awfully weak and thin. But the doctor, who "was so faithful and attentive," is hailed as a savior; and his bill, paid in installments, as it may be, is looked upon as a sacred, material acknowledgement of the kindness of Providence in providing such a good doctor in the emergency. It would be more equitable if doctors worked "by the job," instead of by the visit.—Southern Medical Journal.

Does it always work out in that way? Once in a while there may be a physician who is so much better skilled in the use of his tongue than he is in the tools of his profession that he is able to make the facility of the former repay him (not his patients) for the defects of the latter; still, in the majority of instances, I believe, reputations are won in medicine, as in trade or industry through quality of service.

Exactly the same specious reasoning is employed to excuse the plumber who makes the job that should take him but an hour to finish, last two, or the carpenter or bricklayer who defrauds his employer by stringing out his work to the limit of tolerance. People may be hoodwinked for a while, but when they "catch on," woe be to the hoodwinker! If there is anyone else available to fix their pipes, or build their barns, or cure their diseases, the man who has treated them dishonestly will be out of a job!

It is reasoning like that above which leads so many young physicians of weak wills and unestablished principles into the crooked path. They think that the one great motto of the business and professional world is, "Get the money!" The finger of admiration is too often pointed at the schemer, the half-crook, who has made himself wealthy by questionable methods. They do not know-because no one has shown them-of the thousands who have risked all, and lost all, by resorting to deceit, or lies, or worse, for the sake of making (?) more or getting more money.

What a serious, ves, what a damnable thing it is to trifle with human life! How can the physician excuse himself, morally, who neglects to adopt at once those measures which promise the most certain and the most speedy cure of disease? The unnecessary visits, the "discouraging headshakes," the unneeded and improperly used medicines, that do harm instead of helping, are all an indictment of that man's character.

Of late years the business world has come to understand that the two most important considerations in business building, more important even than a fine presence and a persuasive tongue, are "quality of goods"

and "excellence of service." They are just as essential in the professional world. The doctor's "goods" are his knowledge, not mere theoretical knowledge, but the knowing of anything and everything that can aid him to cure his patients, cito. tuto et jucunde. Instead of scheming how he can extract every possible dollar out of his victim, let the young doctor devote his time and his brains to exhausting the possibilities of curing every patient. The doctor's "service" consists not alone in the pills he administers or the bandages he applies; no, his service also lies in his way of applying the Golden Rule.

It is a pity that this insidious doctrine of giving little and getting much is being instilled into the minds of the rising generation. Perhaps it is a sign of the terrific stress from which our profession, like others, suffers at the present time. The time may come—as surely it should when the new preventive medicine, advocated in these pages, shall become an actuality. When the physician's financial interest centers in the effort to keep people well, in that happy time the complaint that doctors prosper by keeping men sick

will lose its force.

May such a day come soon! But meanwhile let us remember that all the success worth while is to be had by "quality of goods and excellence of service."

HOW TO BECOME OLD!

Alcohol, tobacco, coffee, and food taken in excess of the need, each has been ascribed as the cause of premature old age. Each has its influence, but with each there have been cases cited where the free and even excessive use was continued beyond the century limit. A Savoyard woman reached the age of 114 years, although her principal food was coffee, of which she took as many as forty cups a day. Politiman lived to 140, although he got drunk every night. Ross, who died at 102, was an inveterate smoker. Mme. Lazennec, an inveterate smoker from youth, died at the age of 104. The writer's great-grandmother began to smoke at 16, and continued the habit until her death in her 100th year.



Salpingo-Oophorectomy

A Clinical Report

By HENRY F. LEWIS, M. D., Chicago, Illinois Professor of Gynecology, Bennett Medical College

Hysterectomy in a Girl of Fifteen

THE first patient upon whom I purpose to operate this afternoon is a girl of fifteen who has suffered from more or less pelvic symptoms since the birth of her child about a year ago. Before this she seems to have had gonorrhea, judging from the history of pain and burning at micturition, copious purulent discharge from the vulva, and subsequent pain and tenderness on both sides of the lower abdomen and pelvis. She has menstruated regularly for the last several months, but her pains are intensified at the menstrual periods. She complains of frequent micturition even now, with slight tenesmus following. The urine contains considerable albumin, and its sediment shows abundance of leukocytes, but no casts. The reaction is acid. No particular tenderness in the base of the bladder is discoverable on digital examintion of the vagina. The uterus is normally anteverted, of normal size and not very tender. To the left of the uterus and extending into Douglas' cul-de-sac behind it, bimanual examination reveals considerable tenderness and a thickened cord running from the side of the uterus and ending in a soft, fluctuating, rounded mass. On the right of the uterus there is some tenderness, but I have been unable to detect any thickening or mass. A blood count made today shows 12,000 leukocytes.

The indications for operating seem to be: continual attacks of more or less severe pain in the lower abdomen and in the back, from which she and her friends demand relief, as also the presence of what appears to be at least an enlarged left tube ending in a cystic enlargement of the ampullar end or of a cystic ovary.

Removal of a Cystic Ovary

I make an incision just above the pubes of about two and one-half inches in length and find the omentum lying directly underneath. Passing my two fingers into the abdomen behind the pubes, I come upon the fundus of the uterus and, passing behind that, I feel a soft mass as large as a hen's egg lying close to the uterus and partly to the left. From this rounded cystic body I can trace the left tube running to the uterus, considerably thickened distally and becoming normally narrow at the uterine extremity. The mass and the tube are adherent to the uterus to the left broad ligament, in one or two places to the sigmoid, and behind to the sacrum and rectum. These adhesions are not very dense or strong and I can separate them without great difficulty. In this case the fingers can be gradually inserted between the uterus and the tumor-mass, and, by carefully working through the line of cleavage, I can gradually shell out the left tube and ovary from the bed of adhesions and bring it into view outside the incision.

As you see, there are two places where the tube is adherent to an epiploic appendage of the sigmoid but where it can easily be freed therefrom. The cystic mass appears to be the left ovary, about as large as a small egg and exhibiting upon its surface many places where adhesions have been separated. The enlarged fimbriated extremity of the tube also shows these marks of adhesions. The uterine third of the tube appears to be healthy and there is no need of removing that portion.

We pass an eight-inch forceps over the broad ligament, just a little below the tube from the outside inward to within about one inch of the uterus. Now we pass a suture of catgut just beyond the end of the forceps and tie it. Now we take the scissors and cut away the broad ligament just above the forceps and cut off the tube just above our ligature. The cystic and possibly purulent ampulla of the tube is now removed. Next we whip the needle of our suture around the forceps from the point toward the heel, making several stitches over and over, including the broad ligament and the forceps. When we reach the end of the broad ligament toward the wall of the pelvis, we have the forceps loosened and removed through the loops of our running suture and immediately pull these tight, thus leaving a suture over the upper margin of our severed broad ligament. The suture is tied at the outer end.

Passing the sharp point of the scissors into the opening at the end of our tubal stump, I will slit the tube about half an inch, in the hope of leaving an artificial ostium. With the sharp end of the scissors I open the cyst of the ovary, evacuate its contents, wipe away with gauze the velvety wall, resect the cystic portion and suture the rest.

On the right side there is to be felt only a tube and ovary of apparently normal size but more or less adherent to the broad ligament and the uterus. After separating these adhesions with the fingers, we will bring the tube and ovary into the incision. Since, barring the marks of the adhesions, both look normal, there is no reason for doing anything more with them and we will close the abdomen, after first looking carefully over our interabdominal wounds, to see whether there is any bleeding. Our method of closure of the abdominal incision is by catgut running suture for the peri-

toneum, catgut locked running suture for the fascia, and the Michel metal clips for the skin.

Pyosalpinx Due to Gonorrheal Infection, in a Colored Girl

The next patient is a colored girl of eighteen who had a baby and presumably a gonorrheal infection about two years ago. The child died in the early weeks from convulsions. The patient has had a leucorrheal discharge for several years. Since the child was born the patient has suffered from much pain in the back and in the lower part of the abdomen, aggravated at menstruation, and has had for the past six months obstinate constipation, only relieved at intervals by large doses of cathartics.

Bimanual examination shows a bilateral laceration of the cervix of moderate degree, a uterus strongly retroverted and bound down to the posterior part of the pelvis. Closely attached to the uterus and not easily differentiated from it is a mass as large as a fist occupying the whole of the cul-de-sac and extending to each side of the uterus. The whole mass seems almost like one body with the uterus and is very tender on examination.

We will essay a diagnosis of probable double pyosalpinx with probable involvement of one or both ovaries. The uterus is evidently retroverted and held in its false position by adhesions. The pressure of the mass and of the retroverted uterus upon the rectum probably accounts for the constipation. In the acuter stages of pyosalpinx there is often great pain on defecation from pressure of feces upon the inflamed tissues of the tube.

Technic of Removal of Ovary and Tube

After making an incision like that in the preceding case, I find that the uterus and the mass behind and on each side of it are all snugly bound together and to the posterior wall of the pelvis by adhesions. These I gradually and carefully separate, working down behind the uterus and between it and the tumor mass and finally shelling out from this bed the appendages of the left side.

As you see, as this mass is brought up into view, the tube is thickened and distended to three times its normal diameters and is thickened even to the uterine extremity. The left ovary, except for the marks of adhesions, appears normal and therefore can safely and properly be left behind. Again we pass a forceps, clamping the broad ligament under the tube, and this time as far as the uterus, and tighten it upon the broad ligament. After cutting the uterine end of the tube away by a wedge-shaped incision into the uterine wall and sewing up the uterine wound, we cut away the whole tube from above the forceps with scissors, and suture the broad ligament over the forceps as in the former instance.

Turning our attention to the right side, we find that there is a rounded cystic mass there which, as we finally enucleate it and bring it up into the wound, proves to be the right ovary enlarged to the size of an egg by a cyst. The tube of this side appears normal and the passage of a probe into its fimbriated end shows it to be permeable. We will therefore resect the cystic portion of this ovary.

Next we must do something to prevent the uterus, which you can see now can easily be replaced into its normal position of anteflexion, from falling back into the denuded cavity where the tubes and ovaries formerly The best thing for that purpose in this case is shortening of the round ligaments, with the intention of holding the uterus in the proper position long enough for the raw surfaces to heal over, for the sacrouterine and round ligaments to recover their normal tone, and for the other supporting structures of the uterus in the pelvic floor and the anterior vaginal wall to resume their normal characters. After that the uterus will remain in its normal position just as it did before it became imbedded in the mass of inflammatory adhesions in which we found it.

Shortening the Round Ligaments

The method of shortening which I have found the most satisfactory to myse!f is the simple one of folding the round ligaments upward and suturing them to the uterus just below the origin of the ligaments.

First holding the wound toward the left by the deep retractor, we grasp the left round ligament about an inch downward from its uterine origin with an artery-forceps and pull this loop up to the uterus. The proper length of the round ligament will be determined in each case by trial. Holding the loop at the insertion of the round ligament into the uterus, it is fastened there by two catgut sutures; and then the process is repeated on the other side. It is very quickly done and is very simple. It surely does what we want of it. You now can see the uterus held in its proper position by the shortened round ligaments, and we will close up the abdomen as in the other case.

Shortening of the round ligaments is a far preferable operation to ventrosuspension or ventrofixation, because the uterus is not left tightly bound in an abnormal position where it may undergo much tribulation in a possible future pregnancy, or where its abnormal situation may cause it to press upon the bladder or draw upon that organ in a way inclined to produce many aggravating symptoms of bladder irritation or worse.

When to Operate

The time to operate in cases of this kind is determined largely by the acuteness of the symptoms. It is dangerous to operate in the stage of acute gonorrheal or streptococcic infection of the tubes and pelvic peritoneum. The patient at this time will exhibit symptoms of great pain and tenderness in the whole pelvis and lower abdomen, will have fever (often quite high), will be physically and mentally much depressed and, in short, will be acutely ill and a poor subject for any operation which is not demanded to save life.

Severe as these symptoms of acute salpingitis and pelvic peritonitis are, they almost always improve under palliative treatment, while very likely to prove fatal under laparotomy. At this time the operation will open up large areas for lymphatic, venous and peritoneal absorption of toxins. This is the time to treat such a patient by absolute rest in bed, very restricted diet, laxatives, colonic flushings, antifebrile medication, hot fomentations to the lower abdomen, and such palliative measures, combined if absolutely necessary with opiates. In a few days, as the symptoms, especially

the acuteness of the pain and tenderness, subside, copious vaginal douches of [hot sterile water several times a day will be beneficial. The patient usually will recover in a few weeks enough to get up and go about again.

As soon as the pain and tenderness will permit a bimanual examination, it will usually be found that there remains a more or less tender mass behind and to one or both sides of the uterus and usually adherent to that organ. This mass will become less tender and will decrease in extent under hot douches, tampons, laxatives, etc., but will seldom disappear entirely. In many cases there will never be any return of the acute symptoms. In a goodly number of the cases the inflammatory products, instead of absorbing, will collect into one or more abscesses behind or at the side of the uterus and filling up the pouch of Douglas. In some cases it will be necessary to open such abscesses through the vault of the vagina to evacuate the pus.

In all cases there will be some pathologic products left in the tubes, ovaries or pelvis, and these lesions may, and often do, light up again with acute inflammatory symptoms. Therefore, when any marked symptoms persist, it is indicated to operate by the abdominal route. This should be done in time of comparative peace and after the subsidence of the fever. The leukocytosis in most instances persists and is itself one of the indications for operation. It shows that the patient is reacting.

We do not now consider it necessary to wait a year or several months after the subsidence of the acute symptoms before removing the diseased organs, but can usually safely interfere surgically a week or two after the fever has gone. By that time the patient's tissues have become more or less immune to the infectious microbes present and the microbes themselves have largely lost their virulence. Especially are we compelled to operate upon those patients who, by reason of poverty, indolence, distance from competent professional services or other reasons, cannot undertake thorough and persistent local and home treatment for their pelvic disorders.

The Question Of Abortion*

Considered in Its Ethical and Social Aspects

By WILLIAM J. ROBINSON, M. D., New York City

EDITORIAL NOTE.—This paper is really a continuation of the author's paper on "The Limitation of Offspring," which has already appeared in these pages. Every physician who has followed the doctor's argument thus far will desire to read carefully (and he must read thoughtfully, whether he agrees or not) this final paper.

AX NORDAU, the clever author of "The Conventional Lies of Our Civilization" and of several other clever things, has recently coined a clever word. The word is "acrochronism," and it refers to the belief which is shared by the majority of people, that the period they live in is the best of all periods, superior to any period that has preceded it.

And right here let me say that I believe, in spite of the fact that humanity is not advancing in a straight line, but in zigzag;

in spite of the fact that occasionally we take a decided step backward; in spite of the fact that some periods are poorer in great men, in philosophers, in writers, than some preceding periods, I believe, I say, that, with the exception of the dark middle ages, which for a thousand years hung like a pall over the world, acrochronism is justifiable, and I am willing to be classed among the acrochronists. For we are making progress, and if we make up the balance sheet at the end of every ten or twenty-five years, we shall find the sum total decidedly in our favor.

^{*}Read before The American Society of Medical Sociology, at The New York Academy of Medicine, May 12, 1911.

We have not yet solved all the questions in philosophy, in morals, in religion, in economics that confront us. Regarding some of the questions, we are no nearer solution than we were a century ago; but one point we have reached: we are no longer afraid to discuss any question. There are no sacred subjects any more the mere discussion of which is considered a crime. We have passed the childish stage in which we were told that certain questions must not be touched, that it was a sin to think of certain things or to try to analyze them, to find out the why and wherefore. We recognize no barrier to any discussion. We recognize no closed doors which we must not attempt to open with the key of critical analysis. In short, in the arena of discussion we recognize no forbidden ground. We recognize but one dangerthe danger of silence, the danger of repression. No matter how wrongly a question may be discussed, it is by far better to consider it openly, even if erroneously, than not to discuss it at all. If we discuss a question wrongly, someone is sure to point out our error, but if for fear of appearing unconventional, of being criticized by Mrs. Grundy, we hide our opinions, smother our convictions, how can we ever arrive at the truth?

Why Not Discuss the Abortion Problem Philosophically?

The question of abortion is of great interest from a philosophic, biologic, moral, and social standpoint. Unfortunately it has always been surrounded with so much bigotry, so much hypocritical cant, that the issue has been entirely obscured.

There is no reason why this question could not be discussed calmly, judicially, without bias and without fear. This I will

attempt to do tonight.

And I can do this the more readily, because, strange as this statement may sound to you, I personally have never produced an abortion. Yes, it is eighteen years today since I received my M. D. degree, and during that time I have not committed one single abortion. I know this sounds strange in a large audience of physicians, but it is so.

But, pray, do not for one moment imagine that it was on moral grounds that I refused the hundreds of pleading, weeping heart-broken, distracted women, married and unmarried, who begged and entreated to be freed of the fruit of their womb. No. I repeat, it was not moral superiority; it was pure cowardice, principally. I may have contempt for a law, but I prefer to obey it as a matter of wisdom—as a matter of egotism, if you will. I have always felt that I have something important to do in this world; I felt that I had a message for humanity, and I therefore thought it best not to endanger my peace of mind and not to run the risk of getting into the clutches of the law. Yet there is no particular merit in such an attitude. It is a policy of wisdom, but it has nothing to do, I wish to emphasize, with high moral courage.

Another reason for my keeping shy of abortions is that it is hard to shake off the feelings for prejudices engendered by early training; and I have always had a personal dislike for the abortion business; and I have always been taught as a youth to despise the abortionist. And the professional abortionist, it must be confessed, is not a high-class individual. True, he may prove, and often does prove, a great benefactor, but the fact must be borne in mind that the professional abortionist is not in the business for altruistic purposes; he does not do the work out of pity's sake. as physicians sometimes do; he does it only for the money. If you don't believe it, ask a professional abortionist to bring on an abortion on a poor girl, without charge.

So you see what my personal views are. But I have always had deep contempt for the hypocrite, and likewise great pity for the muddle-minds who would get up in a medical society and brand the commission of an abortion as a crime exactly equivalent to that of murder, and would, with eyes raised to heaven, stigmatize the one guilty of an abortion, whether it be the aborter or abortee, as a murderer.

Gentlemen, if every physician who even once in his career-under the stress of tragic circumstances, in order to save the life and reputation of a young girl and the happiness of her parents—performed an abortion, is a murderer, then seventy-five percent, nay, probably ninety percent of the medical profession are murderers. And if every woman who had an abortion performed on her is a murderess, then millions of our child-bearing women are murderesses. And I tell you that some of them are beautiful murderesses, sweet, gentle, kind, attached to their husbands and children, devoted to charitable work, and altogether lovable. A peculiar kind of murderess.

Should any of my utterances appear to you too radical, should any of my friends think that some of the things I say might better be left unsaid, then I can only reply, paraphrasing slightly the young genius, the lamented author of "The Martyrdom of Man": In the matter of speaking or writing I listen to no remonstrance, I acknowledge no advice, no decision save that of the monitor within me. My conscience is my adviser, my audience, and my judge. It bids me write and speak as I write and speak, without evasion, without disguise: it bids me go on as I have begun. whatever the result may be. If my opinions should be condemned, without a single exception, by every one in the audience here, it will not make me regret having expressed them, and it will not prevent me from expressing them again.

One Million Abortions Each Year

That the question of abortion is of tremendous importance will be acknowledged by everybody who has given the subject any consideration.

The number of abortions performed annually in this country is so appallingly large that the uninitiated cannot be blamed for being somewhat skeptical when the figures are mentioned. I have gone on record with the statement that about a million abortions are brought about every year in the United States. Exact statistics are not and never will be available; but I am sure that my estimate is a very conservative one, and that three millions would be nearer the truth. Justice John Proctor Clark stated that one hundred thousand abortions are performed annually in New York City alone, and if these

figures be correct, then the number for the United States would be in the neighborhood of two and a half millions.

Can you form any conception in your minds as to what this means, in shame, in humiliation, in anguish, in economic loss, in time and money, in chronic inva'idism, in permanent sterility, and in premature graves? No, I fear you can not. And the worst of it is, that abortion and the demands for abortion are not diminishing but increasing from year to year, as can be testified to by all general practitioners. And as far as the immediate future is concerned, the evil is sure to keep on the increase.

The reason for this is a two-fold one: First, married women are beginning to rebel against an unlimited number of children, they are beginning to refuse to be drudges, good for nothing except breeding and nursing; they are beginning to feel the tremendous responsibility of bringing children into the world for whom they cannot provide, and having failed, on account of ignorance, in preventing pregnancy, they will try to interrupt it. No physician in this room will deny that the demand from married women for bringing on abortions is becoming greater from year to year.

Modernized Woman's Abhorrent Views On Chastity

The second reason is that our unmarried women are beginning to look at sexual relations from a different point of view. Of course I do not speak of all women, but I speak of a large, constantly growing number of educated, thinking, independent women.

These women—it is shocking, but it is true—do not regard chastity as the greatest treasure of woman, or the greatest honor of woman. They are not like the ancient Roman or Jewish women, who were always ready to give up their lives for their honor. No. Many of our women of today regard chastity as but an empty virtue, a hollow shell. They have been taught the injustice of a double standard of morality. If a woman can remain chaste until marriage they have been told, so can a man. But as they saw that men do not remain chaste, they decided that they themselves need

not do so either. In other words, they turned the proverb around and declared that what was sauce for the gander was also sauce for the goose.

And there is no use denying that there is a constantly growing number of unmarried women who indulge in sexual intercourse habitually, without considering it any more wrong than do men. And, of course, when these self-same women get into trouble, they will demand relief. And you cannot blame them. As long as illegitimate pregnancy is considered the blackest of crimes, as long as maternity unhallowed by priest or magistrate is considered the deepest and most shameful sin of which woman is capable, so long you can not blame the unmarried woman for wanting and demanding to get rid of the fruit of her passion, of the evidence of her "sin."

These women are not low and debauched. as our puritans and theologians would have us believe. They would prefer to get married, to live like true, faithful wives, for unlike men, who by nature are polygamous, women are by nature monandrous. But on account of social-economic conditions, marriage is all the time becoming a harder and harder proposition; it is becoming more and more difficult to make a career, and therefore the age at which men get married is getting further and further advanced; many never arrive, while others, when they are ready financially, find themselves so old that they decide to end their lives in single blessedness. Many old bachelors means many old maids. The old bachelors have no difficulty in satisfying their sexual needs.

What should the old maids or the relatively young but prospective old maids do? Remain old maids, crabbed, soured old maids to their last day? Well, thousands and thousands are doing it. Thousands and thousands of women are ruining their health, destroying their beauty, stifling their desires, renouncing the greatest joy and pleasure of life, the companionship and embraces of the opposite sex, are bringing all these sacrifices for the sake of a principle which is very dear and very real to them, though others consider it but an

empty bauble. But those women who have thrown off the restraint of religion and are not hampered in their acts, by what is to them a fictitious morality, are not willing to sacrifice their lives to a myth, to a symbol, and with these women, unless, as I said before, they acquire the knowledge of the prevention of conception, the medical profession will have to count.

What Is the Remedy?

Some of our esteemed friends have an infallible remedy for all this world's ills.

Teach the people morals or religion (which terms to them are, by the way, synonymous), they tell us, and all will be well. "Teach the people that abortion is a crime equivalent to murder, that the mother who has an abortion performed on her is a common murderess. Excoriate the abortionist in the press and in the pulpit—and the evil will disappear."

How naive, how childish, or shall we use a stronger word and say, how stupid? Here they have been teaching, preaching, cursing and excoriating for two thousand years; yet the evil, instead of diminishing, is increasing. And still they have not the perspicacity to see that the remedy they propose is an ineffective one.

The same thing with the prevention of venereal disease. We all know the terrible ravages of venereal disease. We see the incalculable damage it is doing to the individual, to the family, to posterity. But when it comes to remedies we differ. Our conservative friends who have not succeeded in freeing themselves from the thraldom of custom, tradition and superstition have but one remedy to offer: Preach morality, preach chastity, frighten the people with the spectre of syphilis and gonorrhea. That this preaching and frightening process has been going on for two thousand years without any effect whatever seems to have no influence on them. They keep on repeating the same vapid, though undoubtedly in most instances sincere, platitudes, year in and year out.

We radical thinkers, who are not afraid to look at every question from a broad philosophical viewpoint, who combine with our idealism and hope for the future a desire for practical results in the present, have seen the inefficiency of moralistic preaching, and have decided that if we wish to diminish venereal disease under our present social conditions, the only thing to do is to show the people how to use real preventive measures. And where preaching and cursing have proved worthless, protargol and calomel have shown themselves marvelously effective. Our Government puts these remedies into the hands of our soldiers and sailors, and everywhere there is a marked diminution in the incidence of gonorrhea and syphilis. And we cannot see why the means that are used with such good effect by the army and navy, by the student bodies of Germany and France, cannot be put into the hands of the general public with similarly good results.

To return to the abortion question, which presents a similar aspect. Recognizing abortion as an evil, and recognizing that the most thunderous anathemas of the church, the most horrible threats of eternal punishment have failed to do any perceptible good, we turned to more practical,

more efficient measures.

There is one measure, and one only, which will quickly and positively do away with the evil of abortion, and that is, teaching the people how to prevent conception. This is but one of the evils which the knowledge of the prevention of conception will do away with, but it is an important evil. Of course our socalled moralists and thinkers who belong to the kindergarten class object to this-but this we cannot help. We shall have to accept their opprobrious epithets, face their displeasure, and go on with our work. And our motto will remain: No undesirable pregnancies, no forced childbearing, no children brought into the world as accidents.

Is Abortion Ever Justifiable, Except To Save the Mother?

We now come to the other part of the paper: Is abortion ever justifiable? Particularly, is abortion ever justifiable when the mother's health is not threatened?

There is a religion which considers abortion unjustifiable, under any and all circumstances; even when the mother's life is at stake; even when the mother is sure to lose her life, unless abortion be induced. These views are to us so medieval so inhuman, that we cannot discuss them. We can only condemn them as unworthy of an enlightened humanity. The more liberal religions and the vast majority of the public in general recognize that abortion is justifiable whenever the mother's life is threatened, and our textbooks on obstetrics give a number of indications where the physician is justified in inducing abortion. Such are: uncontrollable, pernicious vomiting of pregnancy, severe albuminuria, tendency to eclampsia, puerperal insanity in previous labors, deformed pelves, certain cases of heart disease, tuberculosis, and a few other conditions.

Let us now see whether abortion is ever justified when the mother's health or life is not at all threatened. To make an argument carry conviction, to make it strike the nail on the head, it is a good thing, at least it is often necessary, to take a striking illustration. Let us take the following example.

Pregnancies the Result of Rape and Incest

A beautiful girl, of a fine family, barely 16 (and, by the way, this is an actual and not a hypothetical case), is assaulted and raped by a brutal negro. To the indescribable horror of the girl and of the parents, her menses fail to appear at the expected time, and the horrible fear of pregnancy becomes a certainty, corroborated by a physician, in another month. The girl's health, however, strange to say, has not suffered in the least. Nature, as you know, does not know the words licit and illicit.

Now I am asking you this clearcut, unequivocal question, to which I would like to have a clearcut, unequivocal answer: Is abortion permissible in that girl's case? If you answer unequivocally, without beating about the bush, without any hesitation, as one catholic priest did, "No!" then I am satisfied. I simply stop all further discussion, because I can see that we live in different centuries, different blood courses in our veins, different feelings dwell in our hearts, radically different thoughts are produced by our cerebral cells.

You would no more understand me than a Hottentot would understand Shelley's poems, or a blind man appreciate Murillo's Madonna, or a deaf man be thrilled by Beethoven's symphony. But if you say, as I imagine most of you will, "Yes, in the above case abortion is justifiable," or, perhaps, "not only justifiable but imperative," then we can proceed further.

Yes, the thought is revolting to have that beautiful refined girl bear within her womb for nine months and then give birth to a child the father of whom is a brute. It is perfectly brutal and outrageous to have a girl become an unwilling mother under the circumstances. Yes, I agree with you that producing an abortion in the above case is perfectly justifiable. Nay, I am willing to go even further with you and agree that not to produce one would be a crime against the girl and against humanity.

Let us now go a step further. Let us assume a case (and this case is also an actual and not a hypothetical one; in fact, all the examples I am citing here are actual cases from life) in which the assaulter was a white brute, not a colored one. Should the girl be compelled to bear and become the mother of the child of a man whom she detests and loathes? And what love will she be able to give the child when it is born? And what future will the child have? No, for even though the rapist may be a white man, abortion is justifiable.

Now let us take a different case. I know of several cases of incest, where brothers were living with their sisters. I know of two cases where the sisters became pregnant. In one instance an abortion was produced; the other was permitted to go to term, and the child is now in a foundling asylum. In which case do you think was the proper course pursued? In the first one, of course; and it is a damnable shame that abortion was not produced in the second one. The girl-mother's life is blasted forever, for she has the spectre of the child in the foundling asylum before her eyes all the time; she will, of course, not be able to get married; in short, she will have to drag out a miserable existence to the end of her days. And how about the child? If it ever grows up, it is sure to be miserable,

unhappy, living under constant insults and humiliation, and cursing his fate and the day he was born.

Victims of Seduction or of Passion

We now come to the ordinary run of cases that infest the offices of physicians and the abortionists. Cases of girls who became pregnant under the promise of marriage or who lost their reason in a moment of uncontrollable passion.

Here is the probelm: What should you do with those girls who come to you with their frightened eyes swollen from sleepless nights and worry and red from weeping, with anguish engraved in every feature of their face; who trembling tell you their heart-breaking tales; who plead with you that it would kill their mother (and it sometimes does kill the mother, and the father too); who swear to you that unless you help them out they will throw themselves into the river or under an elevated or subway train, or they will take a dose of carbolic acid? (And quite often, more often than you think, they fulfil their threat.) What should we do with those unfortunate girls, whose tears are salty enough to eat through a heart of stone, and with whom not to feel any sympathy it would be impossible, except for a man utterly devoid of any human feeling? What should we do with them? Should we, concealing our sympathy for them, politely but firmly show them the door, as I, for reasons of which I am not particularly proud, have always done, or should we help them out of their misery?

Let us see what becomes of the girls whom we, the respectable doctors, put out of our offices. Some of them get into the hands of the professional medical abortionist—they are the luckiest. For, as a rule, the doctor who makes abortion his business, nefarious as it may be, does his work carefully and aseptically.

Another portion gets into the hands of the midwives and other ignorant abortionists, male and female. Here the poor girls sometimes come out all right, sometimes they pay with their lives, sometimes they become invalids for life. In another portion the girl goes to some home or maternity hospital, stays until the child is born, which is then given to some foundling asylum or farmed out to some poor woman, the mother paying for its board. What becomes of the child, you can imagine. How the mother feels with the knowledge of her hated or loved (which latter is still worse) child in the asylum, I also leave you to imagine.

And still another portion of these girls, ignorant of how or unable to find anyone to help them go through the tortures and humiliations of an illegitimate pregnancy and childbirth, has recourse to one of the means mentioned before: the river, the noose, the train, or carbolic acid; sometimes it is paris-green or corrosive sublimate or the heads of matches soaked in water.

The Story of Little Beatrice

Well do I remember little Beatrice. She was twenty, but she hardly looked it. She got into trouble and she came to me. I knew her. She knew me and knew I was kind, and she hoped that I would help her out of her misery. Wasn't I kind and good? But she did not know how cruel the kind can sometimes be, how selfish the good often are. When I as gently as I could, but none the less positively, refused her, I saw that had I hit her on the head with a sledge-hammer I could not have hurt her more. She looked stunned. She did not say much. She did not make any threats of suicide, she gave me one reproachful look with her tear-filled eyes and left. And next morning they carried her mangled little body from under the elevated train into the hospital. She gave my name, and wanted to see me. It was hard for me to go and see her, but I could not refuse her dying wish, and came. She had sustained severe internal injuries, and one could see that she had but a few hours to live. But she was fully conscious. She asked me to hold her hand. And then she said, "Forgive me. Good-by." went. But were I to live a hundred years more, I should not forget her liquid, veiled eyes. I see them now, just as if she stood before me.

I could relate many, many sad heartbreaking cases of disgrace, financial ruin, and premature death of entire families, brought about by the misstep of a young daughter, which nobody would relieve—but the paper is getting too long, and, besides, you probably are all familiar with such cases.

The Better Way

What is the upshot of all this? What is the underlying principle of this paper? Do I advocate abortion? No. Not a bit of it. And I do trust that none of you will go away with that wrong impression or will attempt to misrepresent me and make me say things which I did not say.

Abortion is a disagreeable business, a nefarious business, if you wish; at least it is to me, though I may be suffering from ancient prejudices which I cannot shake off. And it is an unhealthy, unhygienic, even dangerous business. There is always a slight element of risk connected with it. It may give rise to pathologic conditions, many women become chronic invalids, and it may cost the poor girl or woman her life.

No, I do not advocate abortion. But I do most emphatically advocate something which will render abortions unnecessary. I advocate legalizing the teaching of the people how to prevent conception. I advocate that this knowledge be made common property; it will then obviate the necessity for abortions, as it will obviate hundreds, and hundreds, and hundreds of other evilsas I have demonstrated, I believe conclusively, in my paper, "The Limitation of Offspring: The Most Important Immediate Step for the Betterment of the Human Race, from an Economic and Eugenic Standpoint," read on March 4, before the American Society of Medical Sociology.

Once more I repeat: I do not advocate abortion—I advocate the prevention of conception. But as, when you are called to a case of typhoid fever, it is hollow mockery to tell the patient that he should have taken care of himself and prevented the attack, so when little Beatrice, or Fanny, or Jennie comes to you and tells you that her periods have not come around, that she is two weeks overdue, it is too late to add salt to her wound and tell her that

she should have looked out. And in cases where a life, a reputation, the happiness of several people are at stake, we are justified, I believe in sanctioning the induction of abortion. On the one hand we have a mass of unformed or not fully formed, nonsentient matter, which is only potentially a human being; on the other hand we have a living, palpitating human being, we have several other human beings, who can all suffer, the parents and the brothers and the sisters, we have shame, disgrace, social ostracism, and perhaps death of one or more persons. Which shall we choose?

If it is still difficult for you to arrive at a conclusion, let me ask you this question: Suppose a young woman comes to you and tells you that unless you relieve her of her trouble she will on leaving your office commit suicide. Suppose you know the young woman, know her high-strung character, know her high-mindedness and truthfulness, and know that she never utters empty words; that whenever she says something she means it. Suppose you are absolutely convinced in your mind that she will carry out her threat and that within twenty-four hours she will not be among the living. What then? Are you then morally justified in inducing an abortion? If not-that is, if you answer no-then let us go further.

Why do you say that, if that woman suffers from uncontrollable vomiting or develops eclampsia, you are justified in producing an abortion? You say that her life is in danger, and you are justified in trying to save it. Isn't in the former instance the woman's life in still greater danger? I may be mistaken, but it seems to me that our ideas on the subject are rather coarse and muddled up and need a thorough overhauling.

If it is a purely physical condition that threatens the patient's health or life, such as vomiting, eclampsia, a contracted pelvis, a fibroid tumor of the uterus, rapidly developing Bright's disease or consumption, then we are justified in interfering; but if it is an indescribably horrible mental anguish, if it is the fear of shame and disgrace that we know will positively hurl

the woman into the jaws of death, then we must not interfere. We must sit with our arms folded and show the dying victim the door. I may be wrong, but it does not seem right to me.

People must be taught to perceive that there are conditions of mental anguish which are a million times worse than any physical ailment or disability can be. Worse than death itself.

I feel very deeply on the subject, for I have passed many sleepless nights in self-accusations—not for having performed abortions, but for not having performed them. I am not very successful as a sophist and I could not avoid the conclusion that I was almost as guilty of the death of little Beatrice as if I had pushed her under the wheels of the locomotive.

Summary and Points of Emphasis

Permit me now to make a brief summary of what I have said, emphasizing a few points:

1. Abortion is an unpleasant business ethically, has always a slight element of risk in it, and, if improperly performed, often leaves the woman an invalid.

2. The best way, the only proper way, of dealing with abortion is to obviate the necessity for it.

3. The best way, the only proper way, of obviating the necessity for abortion is to teach the people the proper means of preventing conception.

4. To be able to teach the people the proper means of preventing conception, it is necessary to change the brutal and stupid law making the imparting of such information a crime punishable by five years' prison and five thousand dollars fine.

5. To call a physician who under certain special circumstances found himself obliged to induce an abortion a murderer, to call every woman who underwent an abortion a murderess, is silly and hypocritical; and those that apply these terms generally know that it is so.

6. I should like to see the term criminal abortion applied with more discrimination than it is now. I know that the induction of abortion is legally a crime, but that does not mean that it is always morally a crime.

Just as there are many actions which are not at all punishable by law, but are nevertheless the blackest of crimes from a moral point of view.

7. As long as our social system remains as it is at present, as long as marriage remains an unattainable ideal for many women, as long as the vast majority of people remain ignorant of any means of preventing conception, as long as illegitimate pregnancy is a matter of the greatest shame, as long as illegitimate motherhood is the greatest disgrace for the mother and illegitimate childhood the direst calamity for the child, so long will there be a tremendous demand for abortions, and so long will the demand be satisfied. If not by those in the profession, it will be satisfied by those out of it—and satisfied in a bungled, sometimes dangerous manner.

8. We can hardly escape the conclusion that under the conditions enumerated in the preceding paragraph the induction of abortion is often morally justifiable, and sometimes morally imperative.

9. It is a very serious question with me whether the physician who under certain circumstances induces an abortion is not morally a better man than he who closes his ears, his eyes and his heart to the tearful pleadings of these most unfortunate victims of our false social system and false morality, and tells them either gently or roughly to get out of his office, and not to dare to

insult him with the dastardly proposal to commit a crime.

10. Under the conditions enumerated in paragraph 7, the abortionist is a necessary evil. And while I heartily approve of the activity of our medical societies in prosecuting unlicensed practitioners and quacks, I have no sympathy with the work of spying upon and hunting down and prosecuting the abortionists. Our societies could have their time employed to better advantage. I may find very few people to agree with me on this point, but it is my opinion, and I must express it, for I have promised myself either not to speak at all, or when I do speak, to speak the truth as I see it, and the whole truth.

11. For certain purposes in the discussion of the question, it is well to bear in mind that he who cries out most loudly against the nefarious crime of abortion in public is occasionally quite an industrious abortionist within the four walls of his office.

12. The last word has not yet been spoken on the subject. I do not claim it has. But whatever the opinions may be, it is time that the question of the justifiability of abortion under certain nonpathologic conditions be freed from cant and hypocrisy, hysteria, theologic and traditional bias, and be discussed in a calm, judicial, scientific, and above all, humane spirit.

Calcium Sulphide in Scarlatina

By GEORGE L. SERVOSS, M. D., Fallon, Nevada

URING an epidemic, extending over several months, during which many cases under observation developed complications, myself and one of my confrères administered calcium sulphide and watched very carefully the conduct of the cases during and after such course of medication.

We found that when the sulphide was pushed to the limit and until there was a marked odor of sulphureted hydrogen in all of the excretions, the severity of the disease was much lessened. In none of the patients so treated did there appear any kidney complication. The initial sore throat disappeared at a very early date, and in several cases partial desquamation was established, even when the rash was making its appearance on other portions of the body. It has also been noticeable that desquamation has been established much earlier than when the calcium sulphide has been omitted.

It has further been noticed that, after full saturation with calcium sulphide, the patient apparently has been well, in so far as symptoms other than the rash have been concerned. Not only have the subjective symptoms been lessened, but the objective as well. In one case coming under our observation, very recently, we found that, as soon as saturation was secured, the temperature dropped rapidly and the patient became very hard to handle, in that she said she was not at all sick and wanted to be outside playing with her brother. Prior to the use of the sulphide in this case, there had been some nausea, but this disappeared with the establishment of the effect of the drug.

Following the suggestion that full saturation of others than the person directly infected with the malady would serve as a prophylactic measure, we gave the remedy to full effect to the healthy ones also, and while some cases of the malady developed among those closely associated with the patient, we found that the severity of the attack was very considerably lessened, and that, in a few instances, the disease did not appear in those so treated.

It is not to be assumed that calcium sulphide was the only drug employed in any of the cases noted. In every instance attention was given to the toilet of the alimentary canal, and when there was pyrexia, the indicated remedies were employed; nevertheless, we believe that calcium sulphide, in addition to indicated medication, exerted a very favorable action.

Every patient so treated showed an earlier convalescence than did those re-

ceiving the ordinary indicated medication, and instead of desquamation of a secondary nature continuing, it was noticeable that the peeling discontinued after the primary desquamation and that the skin was left clean and normal in every respect. Aside from the slight occurrence of transient albuminuria during the height of the fever, in all cases in which calcium sulphide was pushed to the limit, there was no secondary nephritis. Nor, in any of the patients so treated, was there any ear or glandular involvement although both were in a measure common to other cases in which the sulphide had been omitted.

We found that it was necessary to push the drug to full effect, to obtain satisfactory results. In the beginning, the initial dose was 1-6 grain at hourly intervals, which was effective to a certain extent. Recognizing that we were obtaining some results in this manner, the interval was increased to every half hour. This was still more satisfactory, but after some experimenting we found that the initial dose of 1-3 grain every half hour to saturation and then 1-6 grain at hourly intervals produced the best results. It gave us a quick saturation and one easily maintained by the smaller dose at longer intervals.

Our observations have led us to believe that calcium sulphide exercises an inhibitory influence over the causative factor of the disease, even though it may, possibly, not not act as a direct germicide. It is indicated in every case of scarlatina.

The Trend Of Modern Obstetrics*

By A. B. LEEDS, A. B., M. D., Chickasha, Oklahoma

THE medical profession, today, in spite of the great advancements made in the science and practice of medicine, stands self-accused and convicted of palpable neglect of one of its most important branches, that of obstetrics. The realization of this fact by the profession is emphasized by the discussions, to a considerable extent, in the medical journals and association meetings, big and small,

of the latest methods for applying the forceps, the most correct cesarean section, operative interference of every description, and the befuddling views of individual operators for the correction of abnormal conditions.

However, in the mad race for surgical and gynecological fame and the springing, mushroom-like, during the last decade, of embryonic surgeons, we have entirely forgotten, neglected and overlooked the greatest need along this line, namely, that

^{*}Read before the Oklahoma State Medical Association, May 10-12, 1910.

of the prevention of these abnormal conditions. We have been tugging at the wrong end; we have had the cart before the horse; we have waited until the barn was all ablaze before we attempted to clean out the stable to prevent the fire.

From a careful and exhaustive study of the current literature bearing upon this subject, which could be found, it appears that, like the social evil, these things are considered necessary evils, and that all of our efforts must be directed along the lines of operative interference, and Herculean means be exerted at the time of confinement to remedy these conditions.

Having considered for some time that this view of the matter was erroneous and false and there was great need of an awakening, on the part of the profession, to some vital facts concerning this subject, I decided, upon invitation, to discuss this subject as my theme.

Care in the Early Months of Pregnancy

To point to a few causes, the reasons therefor, and the remedies, also to attempt to show that in the great majority of cases, patience and intelligent instruction on the part of the medical profession, in the early months of pregnancy, will obviate and prevent most of these abnormal conditions and hasten a return to the good old days of our grandmothers—when the use of forceps, and the bottle-fed baby, cesarean sections, extrauterine pregnancies, and all that, were, if not practically unheard of, at least a rare complication—will be the purpose of this paper.

When the position is taken by the author that the medical profession is responsible, in the vast majority of cases, for the deplorable physical wrecks resulting from the complications of modern pregnancies, he anticipates a storm of protest.

Yet the hollow-eyed women, pinched of face, with the freshness and bloom of youth forever gone—aged, as it were, in a day or a night, are ever-present accusers of our palpable neglect of this subject.

The girls of today, not only in the cities, but also in the rural districts, in the majority of cases, are ill prepared to undergo the physical demands of a normal pregnancy,

much less an abnormal one, with its usual serious complications.

Let us briefly look over this desolate field of unnatural practices and witness the dire consequences following in their wake.

The practice, so prevalent, of mothers not preparing and educating the girl for the advent of the menstrual flow, and, through this ignorance, the health of the girl often neglected at this time, frequently with serious consequences; allowing girls to have company before they are hardly able to add and subtract, much less being prepared, physically, for irregular hours and the consequent exposure; the wonderful modern corset, in its shapes and latest cuts, varied as the legs of a dragon; the modern plays, shows, magazines and novels, with their usual perverted sexual suggestions; rapid, irregular, irrational and indiscreet eating, as practised by the American people-nick-nacks, candies, ice-cream; lownecked and thinly arranged clothing; early marriages, with no knowledge of the sexual side of married life: the horrible effects of gonorrhea and venereal disease, previously contracted by the husband and disseminated through the system of the young wife during the usually active sexual habits of the newly-weds; the practice of the old women, and more especially of the average physician, for that matter, of telling the recent pregnant woman that, no matter how varied the aches and pains, there is nothing to be feared or peculiar, and by this method and their attitude of jest and lack of interest and attention lulling the fears and anxieties with a false sense of security; all these things, and many more, contribute their part to the overburdening and poisoning of the ill-prepared systems and are responsible, to a great extent, for the sad results obtained in modern pregnancies and so often vividly and horribly depicted in

The old adage and saying "that the only service to be rendered by a physician during confinement is to prevent hemorrhage, turn the child or use the forceps," not only does not apply to modern pregnancies, but it is this very view of the matter so assiduously promulgated by the old women and the attitude of the average

physician that is the bane and the curse of obstetrics today.

A Case Which Illustrates

The following case will serve as an illustration: Mrs. T., age 22, wife of a stockman. Family history negative. During the early months of pregnancy the husband consulted the author, and was told of the necessity of reporting frequently the condition of his wife; also the possible dangers resulting from neglect. The husband was assured that it was so much better rather to be looking for trouble and not to find it than to allow trouble to steal upon and overwhelm us before we realized that there was any.

About a month later, after the husband's return from his ranch, he reported that while his wife was visiting a neighbor, some days before, she had been introduced to another physician and in the course of the conversation she had been told that it was no more than natural for Dr. Leeds (i. e., myself) to make a big fuss over his confinement cases, as he charged twenty-five dollars; also, this physician had noticed that Dr. Leeds always did put his pregnant patients to a lot of unnecessary trouble, but that his wife need not anticipate any trouble, inasmuch as her mother had not had any with any of her children. One examination of the urine a day or two before confinement was mentioned as being sufficient; also his charges would be \$12.50, as against Leeds' \$25.00.

The lady being naturally thrifty, this conversation appealed to her. The sample of urine, at the time suggested, was taken to the \$12.50 physician, who, holding it up to the light, remarked that it was the best-looking sample observed in a long time. The fact had never been considered that the mother of this patient had never worn a corset, and during her child-bearing period, as the wife of a farmer, had led an unusually active outdoor life; furthermore, that this same mother had always tried to shield her daughter from every kind of hard work.

About midnight, a few days later, the author was called, with the admonition to come as quickly as possible, as the woman

was having convulsions. The other physician and the author had a blood-sweating time, and the patient not only a very close call but a very tedious convalescence. Forceps and heroic efforts for very active elimination of all of the emunctories was the treatment necessitated. An examination of the blood and urine revealed an overburdened and poisoned system.

It is needless to say that the family and patient are not only thoroughly convinced of the necessity of the proper preparation of the patient during pregnancy, but they do not allow an opportunity to pass without making a comparison between the methods of the two physicians involved. Which of the two would you rather be?

Examination of the Urine

A mere cursory and occasional examination of the urine during pregnancy does not suffice. Neither will it give a true picture of the patient, because the symptom-complex, characterized by nausea, vomiting, headache, visual disturbances, delirium, coma, with or without albuminuria, casts or edema, hyperemesis gravidarum, and eclampsia does not so much mean a crippling of the kidneys as it does that there is too great a burden on all the emunctories.

Instead of being lulled by a false sense of security when we find that the urine is free from albumin in a patient complaining of some of the symptom-complex-though these may be slight-we ought to realize that the liver is an organ barely capable of performing its normal function in ordinary health, and that, when you add the natural toxins of pregnancy to its burden of everyday metabolism, it is but logical that the organ should undergo some degree of deterioration; also that the kidney trouble and edema, if present, are secondary, and that, in reality, it is the clogged emunctories which need our immediate and urgent attention.

Problems of the Modern Woman

Why can not we realize that the modern woman is an uncertain quantity, nervous though she may be apparently, yet well prepared physically? Also, why can not we try to appreciate that the nervous organization of our modern women has been undergoing a gradual change since the time of our grand-mothers?

Do we consider that our civilization has made such persistent and exacting drains on the organization that not only has the physical development been dwarfed but there has been developed a highly strung bundle of nerves, poorly nourished and sadly out of tune, hardly able to bear the little jars of everyday life, much less the depressing effects of pregnancies, without very material aid at the hands of an intelligent, well-prepared and careful medical adviser?

If we expected a mere horse to come anywhere near winning a race, we should hardly fail to give him the benefit of thorough, careful and intelligent training.

Do we use this same common sense, which the Maker is supposed to have given us, when we allow our pregnant patients to go along in a haphazard manner, during pregnancy, without any intelligent instruction and preparation?

Are we treating them as we should when we do not do all we can to place them in the best condition possible for the great demands which are made both on the physical and the nervous systems at the time of confinement?

Can we anticipate anything but haphazard results from our usual treatment of these cases previous to confinement?

Can we conscientiously be surprised and wonder when, with the treatment usually accorded these patients, we have the accidents and complications so common in modern pregnancies?

Does it not appear somewhat sneaking and contemptible, after obtaining these hap-hazard results, for us to flounder around, in our endeavor not only to satisfy the family and clear our own skirts of any blame, but also to attempt to shift the responsibility to other shoulders than our own?

The author, when a student, was advised by one of his professors to consider every patient tainted with venereal disease until a careful and exhaustive examination proved otherwise. If this same advice were applied to our pregnant charges, so far as being normal or abnormal is concerned, we should surely obtain better results if we proved by careful and exhaustive examinations that there were no abnormalities present.

When Does the Obstetrician's Duty End?

Then, again, instead of lulling our consciences with the belief that, if everything goes right at the time of confinement -mother and baby, both living-our duty ends here, we should give both of them the care and intelligent attention they deserve. We should make a careful examination of the mother, three or four weeks later, for small scratches and lacerations of the cervix, uterus and perineum, and if found, treat and correct them; watch the nervous system for any evidences of a breaking down or depreciation of tonicity, and anticipate any suggestions of uterine trouble, such as displacements and like complications; and in this way try to leave the mother in as good condition as she was before pregnancy; neither would we be compelled so often to tax our explaining powers to the limit in our endeavors to assure the patient and family that the untoward results obtained were not and are not the results of our negligence and lack of proper advice or attention.

The practice of the author has been to give the patient and family distinctly to understand, at the time of confinement, that he does not consider his confinement cases dismissed until after he has satisfied himself thoroughly by a careful examination, in the presence of at least one member of the family, some three or four weeks later that the patient is in as good condition, physically and nervously, as she was before pregnancy.

How I Saved Myself From Trouble

The following case will show that this practice of the author stands one in hand quite frequently.

Mrs. S., age 24, extremely nervous temperament. In her first pregnancy and confinement she had no trouble of any nature, except that she was unable to nurse the baby. When she was six months

pregnant the second time, she not only received quite a nervous shock, but, as a result of the shock, worried continually. The confinement and convalescence were normal, baby was all right, and this time she was able to nurse it.

Three weeks later, in the presence of her mother, the author examined her carefully and showed that the uterus, cervix and perineum were normal. However, the patient was advised to be very careful for some little time, because she had had quite a large child, was nursing this one, and had not fully recovered from the constant worrying and shock of three months previous.

A short time after this examination, there was added to this depressed condition of the nervous system the effects of another nervous shock, though of a different nature, and, as a result, the patient developed an attack of insanity, together with quite an antipathy to her family physician, the author.

Another physician was called, who, without an examination, suggested that the cause of the patient's trouble was a lacerated cervix which had not been repaired. The mother of the patient was up in arms at once, telling this physician that she knew better than that, because only a few days

before Dr. Leeds had examined her daughter and at this examination had shown her, so that she was satisfied that there was no trouble there. The mother and husband becoming dissatisfied, the author was consulted and, at his suggestion, the patient was taken to Dr. Punton's Infirmary, at Kansas City, Missouri, the baby taken from the breast and a uterine sedative given the patient, in the hope of establishing the periods. Twenty-four hours after reaching the infirmary the patient began to menstruate, her mind became clear, and in a reasonable length of time she entirely recovered.

When the author learned what the other physician had tried to do to him, you can not imagine how glad he was that he had examined the patient as he had, and at the time he had, and, too, had shown her mother what conditions were present. Dr. Punton, at the suggestion of the mother and husband, examined the patient particularly in that region, and verified the statement of the author.

Unjust criticism might have been engendered against the author by the other physician had this examination not been made at the time it was and in the manner mentioned.

(To be continued)

Picking Pickaninnies

Observations on Obstetrical Practice in Africa

By RALPH ST. J. PERRY, M. D., Parkers Prairie, Minnesota

EDITORIAL NOTE.—Years ago Dr. Perry was a missionary in Africa, in the days when the "Dark Continent" was dark indeed. The readers of "Clinical Medicine" have had the opportunity to hear of some of his adventures, which were always fascinating, frequently thrilling, and not infrequently amusing. This paper is peculiarly enjoyable.

EVERY once or twice in a while some curious-minded individual asks me a multitude of questions regarding the midwifery business in Africa, so I am now taking my pen in hand to divulge for the benefit of those who think of emigrating to, or thirst for knowledge of, that land where practice and experience are plenty, where there are no licensing boards, and where malpractice laws are unknown,

except those of self-preservation and re-

If we want to get oranges, bananas, pineapples, mangoes, or any tropical fruit in all its natural flavor and lusciousness, we must go to the lands where those fruits are indigenous, to the place where we can pick them as they have ripened under natural conditions. So, too, with that other tropical fruit, the pickaninny: if we want to

observe its advent into the world after the fashion of its kind, we must go to the primeval home of the descendents of Ham, where Nature still takes her course after the methods and technic originally introduced by the late Mrs. Adam, past grand ancestrix of the present population.

Just Like Mother Eve: Sans Accoucheur, Sans Trained Nurse

The advent of a pickaninny in the original habitat of the Sons of Ham does not create that intense interest in the family circle which surrounds the birth of a white child in the United States or Europe. No prenatal showers, no aunties or grandmothers bend their energies in the preparation of fancy clothing, bassinets, knit silk socks and booties, and the many other sartorial tid-bits which go to make up the wardrobe of the American babe.

Neither does any doctor or trained nurse look after the interests of the mother and child when the natal hour arrives; in fact, there seems to be an astonishing simplicity about such events, the which would make our M. D.'s, supertrained nurses, and pampered patients hold up their hands and roll their eyes in "holy horror" at the lack of asepsis and antisepsis, and would surprise them at the absence of sepsis. Several times it has been my fortune to be in some up-country village when the conclusion of a cycle of perpetuation was imminent, and to have seen the woman in the case suddenly cease her rice beating, coffee raking or other outdoor work and retire with a woman companion to the privacy of her house, from whence she would reappear in an hour or less with a brand-new pickaninny.

"Just like animals!"

Sure, animals just the same as you and me, a subspecies of homo sapiens, but who have retained much of that primeval strength which you and I have lost through our process of civilization. And after the functions immediately incidental to the nativity had been completed, I have seen the neoteric mother wade into the nearby creek and perform her ablutions without any evidence of fatigue or disability, absolutely fearless of germs or shock, and

without attracting any undue attention from the passing throng.

Can you imagine such a thing occurring in the United States? And, yet, once it did, thousands of times, among the Indians, before the white man transferred to them his burden of disease and bad whisky. But even today it near-happens in the colonies of those peasant emmigrants who have taken up their abode in the newly opened lands of our northwestern states.

Spartan Methods, Up to Date

In the meanwhile the woman companion has been preparing a mess of mashed peppers. That is, capsicum peppers are boiled until soft, then mashed to a pulp, or mush, and this mush is stuffed into the pequeno nino's ears, nose, and mouth, and rubbed over his body and limbs. The child is then greased with palm oil and laid upon a country cloth out in the sun for several hours. If he or she survives the ordeal, he or she is then accepted into the family and community as a worthy descendant of Ham.

This method of testing the vitality of babies smacks muchly of the Spartan methods of old, and while it probably is tough on the youngsters, I never knew or heard of one dying from the effects thereof.

Having demonstrated its ability and physical fitness to live, the child is now cleansed of its peppery coating, washed thoroughly, then greased with burnt palm oil, which completes its toilet-no bandages, swaddling clothes, pinning blankets or other clothing, except at night perhaps a wrapping of country cloth while it lies cuddled up next to its mother. Neither is the baby doped with catnip tea, sugar water, "a wee bit o' whisky," or any of the many other devices which Caucasian customs have invented as substitutes for methods.

The new-fledged mother is not flooded with advertisements of patent baby clothes, cribs, carriages, and all that, nor with samples of baby foods galore; everything runs along smoothly and very seldom indeed does a native child suffer from colic, summer complaint or any of the multitude

of children's diseases which are so generally devastating civilized communities.

Nature's Baby Carriage

In carrying the baby, these mothers resort to a method which is evidently adopted or descended from their tree-living anthropoid neighbors and ancestors, the youngsters being merely lifted up to its mother's waist, where it clings to her body with its legs around her hips and its little hands grasping her arms, ribs, neck or whatever it can get hold off. This is evidently a precarious way of carrying a baby, but it is in reality merely an appeal to the instinctive functions of the child, who inherits from remote generations the impulse to hang on to whatever it grasps. Carrying her child thusly, the mother will go about the daily work of gardening, field work, and other duties, and never once sigh for a kindergarten or day nursery upon which she can shift the responsibilities of child training.

Nor have any of the infant-food makers as yet succeeded in invading the African family circle, and the negro baby still thrives upon the same variety of pabulum in general vogue since the days the original Noah family homesteaded upon Mount Ararat after the ark jolted against that altitudinous rock. The mother nurses the child until all of its teeth are cut and it is fully competent to masticate and digest the various foods ordinarily used by the family at its regular meals. Many times have I seen a two- or three-year-old pickaninny abruptly cease its playing and run to its maternal lunch font for a five-minutes' refreshment séance.

As the child completes its dentition and is prepared to shift for itself a little more, the mother is prone to resort to the stuffing process when she wants to go to a bargain sale or visiting among her neighbors, which stuffing consists in cramming the interior of the baby with as much rice and palm butter as can be forced into its alimental highways and byways. Once I undertook to remonstrate with a buxom young mother on this matter of juvenile gorgement, having caught her in delictu flagranti, telling her it was much like the

French custom of stuffing the geese that were destined to donate their hepatic organs for the making of paté de foie gras; but my a-la-humane-society effort was of no avail, for she confidently informed me that she could not put into the infant's storage room any more than its stomach could take care of and that, as it had been done in her family for many and many generations, she did not now purpose to initiate an entire change of program just to oblige me. Thereafter I ceased to "butt in."

During the time I traveled up and down the Guinea Coast and in and out of the Kong Mountain Country, I do not remember ever having seen a congenitally deformed child. They either failed to show up in the natal products or else were eliminated by the gentle pepper-stuffing process. Nor do I remember ever having seen a case of ophthalmia neonatorum, although nothing particular was done to prevent any such trouble. Only one case of deaf-mutism was encountered, and this specimen seemed to be as much of a curiosity to the natives as he was to me.

A Forceps Case

An unnatural or abnormal labor seemed to be an almost-never experience, and instances where a forceps delivery seemed indicated were few and far between. I remember one time being in a village when a young matron was experiencing her first experience in the maternity line. Things did not progress as smoothly as was desirable because of a large fetal cranium, even for an Ethiopian. In the emergency, an appeal was made to the white-god-doctor for help.

Only too glad of a chance to show off my beautiful nickel-plated obstetric forceps, I most cheerfully consented to officiate. But when the mother-to-be and her attendants saw the glittering instruments, there arose such a storm of protests that I was forced to give way to a native expert, who greased his hands with burnt palm oil and "went after" that baby. He got it, too, alive, squalling, and kicking, and without apparent injury either to mother or child. Just what his manipulations were, I could

not see, nor could he explain to me, as he knew no more regarding occipito-mental diameters, straits, tuberosities, planes, and that sort of thing, than a jack-rabbit. Having accomplished his mission, he took his fee of one chicken and departed.

Accidents of Labor

The women of the Guinea Coast seem to be free from those accidental lacerations so frequently seen in American women. This is undoubtedly due to their unusual physical perfection. In the interior towns the maiden meanders up and down the country lanes, unfettered by clothing or drapery from birth to puberty. Occasionally she may wear a girdle of a string of beads or a few silver bracelets and anklets, but that only on festive occasions. In early childhood she learns to carry water in a five-gallon kerosene can balanced upon her head, to beat and winnow rice, to fish and swim, and the many chores which fall to the housekeeper's lot in Africa. By the time she has ripened into young womanhood, she is the proprietor of a body that is fully competent to take up the burdens assigned to it by nature.

Naturally, the practice of gynecology is very limited among such a class. As previously intimated, I was never called upon to repair a lacerated cervix or a ruptured perineum, never saw a case of mammary abscess or heard of a case of puerperal fever or postpartum hemorrhage. Doubtless such accidents do occur, but they are

very unusual.

Before sailing for Africa I spent a day with my friend, the late Prof. Theophilus Parvin, of Jefferson Medical College, who at that time was interested in collecting deformed pelves. At his solicitation, I agreed to ship him several specimens from Guinealand, but albeit I kept my eye "peeled" for some colored lady from whom I could abstract a pelvis not conforming to the regulation standard, I regret to say that Parvin never received any African specimens from my territory, for the very good reason that I never came across one.

Procreative Simplicity

The reproductive function is looked upon by the natives as a natural one, and there is no attempted evasion of the divine command to go forth and multiply. Pennyroyal pills, whirling sprays, antiseptic douches, and other like requisites of civilized sociability are unknown to these children of nature. A bride is expected to become pregnant within a reasonable period, and the fulfilment of these expectations causes no unusual excitement or gossip at the sewing society or ladies' aid. As soon as a woman's condition becomes "interesting" her husband lets her alone so far as sexual intercourse is concerned, and continues to let her alone until the child is weaned!

How different from the practice in civilized Christian Europe and America. This law—for it is a tribal law—has had such a tendency to reduce the population that some years ago an effort was made by the Liberian and British officials to reduce the period of abstention from three years to two after the birth of the child. But the motion to amend failed to carry.

The one saving feature which keeps up the population is polygamy. A man is allowed to have as many wives as he can provide for, and as provisions are cheap, the larder is usually well filled. Awful, "ain't" it? Yet, under the Mohammedan law, a wife has all the advantages of a woman anywhere in the world, and more than in America. The polygamous wives in Africa are not so numerous as one would suppose, and they are far happier and more contented than you imagine.

Polyandry is also practised in some places, and I once had the acquaintance of Sandymandy—fat, fair and forty—who boasted of seven children by as many different fathers; and old Sandymandy trotted in the select

circles of Ethiopian society.

The mother nurses her baby, p. r. n., literally. She never heard of Holt's learned dissertations on baby feeding, and she wots not of germs—just cuddles her pickaninny up close to her chocolate-colored bosom and lets the little rascal root for his dinner. One peculiarity of the African mammary organ: the prolonged period of lactation, from two to three years, brings about an enormous elongation of the gland, and it is nothing unusual to see

the lactiferous appendages dangling down to the waist line. The baby can cling to the mother's hips, and with the nipple in its mouth contentedly suck away while the mother, industriously wields the hoe.

In case of the death of a nursing mother, the infant is promptly taken over by some other mother who acts as wet-nurse and raises the child. In fact, there seems to be a community of ownership in matters of babies and mammary glands, for I have frequently seen a mother nurse several children besides her own, while seeing the same baby tapping several different milk bureaus in succession.

The nursing bottle, which is a sine qua non in many of our civilized homes, is an unknown commodity in Guinealand. I remember one Christmas box which when opened was found to contain half a dozen old-fashioned nursing bottles, and which caused immense excitement, commotion, and amusement among the "cullud ladies" present. The bottles lay around the mission house for a while and eventually disappeared. Months later I was suddenly stricken with an attack of acute hilarity upon seeing the chieftain of an up-country village solemnly sucking gin toddy from one of the nursing bottles, a procedure which a mischievous mission boy had told his Ethiopian nibs was the proper caper in exclusive society down at the coast.

One thing about these pickaninnies puzzled me for quite a while, and that was

the absence of that triangular gluteal bandage, the diaper. But one day there came an enlightenment. I chanced unexpectedly to come upon a young mother seated upon the grass with her lower extremities extended in front of her, the feet about six inches apart; straddling her shins was her baby, joyfully engaged in the act of depleting its dear little colonic tube. Instantly the full technic of the procedure burst upon me, while at the same moment the mother and I discovered each other's presence, so, amidst mutual embarassment and suffused with blushes I hurriedly vamoosed from the scene. Later I learned that the toilet is completed by a wash in the creek or by means of a plantain leaf.

Fully half the children in Guinealand wear door-knobs, instead of retracted navels, due doubtless to the lack of proper treatment of the cord at the time of birth. These umbilical hernias are so common and apparently so harmless that no one pays any attention to them. I used to amuse myself by catching the little tots and gently pressing the hernial contents back into the abdomen, only to see it pop out again; the titillation producing most hilarious cachinnations. Such a condition here in America would create a furore for navel surgery, but I never saw or heard of a case where one of these umbilical hernias caused any trouble, and their owners wear them unprotected during all their daily labors throughout lifetime.

The General Practitioner as a Gynecologist

Every-Day Helps for Routine Work

By GEORGE H. CANDLER, M. D., Chicago, Illinois

THE physician practising in country districts has, of necessity, to do a certain amount of gynecologic work, but only a very few specialize in this direction, and so the average doctor, failing to relieve the more serious or chronic pelvic disorders with douches, ready-made vaginal tablets and suppositories, recommends his patients to go to the city and consult a specialist or—equally detrimental to his

reputation and bank account—orders them to the local hospital where, as a rule, some trivial operation is impressively done and the ultimate recovery of the patient attributed thereto, whereas, in three instances out of four, the rest in bed and maintained conditions of surgical cleanliness are really responsible for the cure. With a little personal preparation and a trivial outlay of money, every doctor could

do three-fourths of the gynecologic work in his district and benefit materially thereby.

As a matter of fact, the physician who graduated ten years ago received a very poor gynecologic training and not one man in fifty could, on the receipt of his diploma, correctly select and properly place a pessary. More recent graduates were impressed with the idea that operation of some kind should be performed—or recommended—in practically every disorder of the female genitalia. As his idea of how these operations should be done was gained by watching from a distance the professor operate in the hospital amphitheater, he naturally either failed dismally when he endeavored to perform the work himself or from the first "referred" his "hard" cases, confining his personal activities to vaginal packing and an occasional curettage.

The main difficulty the well-educated physician experiences in his gynecologic work is the determination of the exact conditions present in the pelvis and the selection of the treatment best adapted to the case under observation. His fingers (and eyes) have not been trained to recognize minor pathologic conditions and no one dreamed of teaching him how to correct such disorders by the institution of comparatively simple therapeutic procedures. It has been most distinctly an "era of steel" for the gynecologist!

It is with the hope that just such information may be of service to hundreds of busy doctors that this article is written; the man who by special effort has become familiar with the nonsurgical treatment of pelvic diseases will find in it little of interest, while the surgically inclined will perhaps wonder how, in this year of grace, any writer should dare to advocate local treatment when "an operation" would be so much more impressive—and lucrative to somebody!

The Gynecologic Outfit

The gynecologic armamentarium required by the general practician need not be extensive. He will require a good examining table for chair, and the young or impecunious doctor can obtain a perfectly satisfactory article for less than twenty dollars. His choice here should be a plain table or enameled chair with pantasote-covered cushions, stirrups, and folding leg-rests. The more elaborate cabinet-tables and ornate surgical chairs cost from fifty to one hundred dollars and may be bought on the instalment plan, but just why the doctor should go in debt thirty to eighty dollars for a piece of furniture when he can own outright its equal in practical usefulness for the amount of the first payment demanded is an unsolved problem.

Most enameled steel chairs—and some tables—are equipped with a standard and an irrigator. The writer prefers a separate irrigator stand, with two reservoirs. An enameled instrument-table and two enameled hand basins (one blue the other white) held in a light metal stand with a bottom shelf are essential. Two metal pitchers of two to four quarts' capacity, a metal instrument tray, a couple of smaller basins and a slop-jar may advantageously be added. The irrigator may be of metal, but glass is preferable. Rubber fountain-syringes are an abomination outside the home—and not desirable there.

The table should be covered with a clean white sheet and a fresh towel be placed on the head-rest for each patient. Two dozen surgical towels at least should always be on hand. They are best kept pinned up in a piece of linen in packages of a quarter dozen. They should, of course, be sterilized. The country doctor can boil, sun-dry and then bake his office linen and feel quite comfortable about its surgical cleanliness. All dirty towels should be thrown into a closed dry receptacle, and waste cotton, tampons, etc., into a container half filled with a carbolic solution. Each article should be emptied and thoroughly cleaned daily. If the instrument-table has a cupboard underneath (and it should), the towels, tampons, cotton, etc., should be kept there. In any case, these articles must not be exposed unless in use.

Instruments Absolutely Needed

The instruments absolutely required are few; any number may, of course, be used, and undoubtedly the good workman prefers to have a full and adequate "kit of tools." A Sims "duckbill," Goodall's bivalve, and pair of Simon's (curved and flat-blade) speculæ, a vaginal depressor, long straight dressing forceps, uterine sound, flexible silver probe, single and double tenaculæ, a cervical dilator, and a set of rinsing (sharp and dull) curetting spoons are the real essentials. The doctor is supposedly supplied with scissors, artery-forceps, needle holders, and the knives regularly used in minor operations. These will serve in everyday gynecologic work.

Some arrangement must be made for direct lighting of the vaginal canal. A head-mirror and student's lamp may be used where the electric current is not obtainable. Perfectly practical and portable electrically lighted diagnostic outfits are on the market, but the average man can get along quite nicely with a gas flame or even a good lamp and a mirror. It is desirable, perhaps, to have a small electric lamp available; for ordinary bedside work one of the better-quality flashlights found on the market answers every purpose.

Metal applicators are not much used today; wooden rods can be procured for little or nothing, a fresh one being used for each application. However, a "screwpoint" and two or three aluminum (roughended) applicators may well be procured. They are especially useful outside the office. A hard-rubber (or metal) syringe of two to four ounces capacity, with uterine, rectal and vaginal tips, is an absolute essential; it is also well to have a small (2-dram) hard-rubber (or glass-barreled) syringe with long semiflexible nozzle for making intrauterine applications.

Other Appurtenances

An abundant supply of good-quality absorbent cotton should be kept in a dust-tight container; a cheaper cotton may be kept for cleansing or swabbing purposes. This may be used from the roll. Plain sterile gauze, besides iodoform, or better, bichloride or bismuth-formic-iodide, gauze may be bought in 1- and 5-yard glass containers. The gauze is drawn out and cut off as required. A roll of wool for tampons should be on hand. Any doctor's wife or a nurse can make up the tampons as required.

The necessary length of wool is cut off, wrapped in gauze and a tape tied securely about the middle. It is infinitely better to use several small tampons than one or two large ones. The latter never "sit" snugly, as they should.

Bichloride, "astringent-antiseptic" and boric-acid tablets are, of course, required. A liquid soap, creolin or similar preparation, alcohol, carbolic acid, ichthyol or carbenzol, glycerin, iodine, a local anesthetic, and dioxide solution should be available always. Each physician will of course have his own favorite formulas in addition. The writer would not be without a good aqueous preparation of calendula, thuja, colorless hydrastis, and solution of thymol iodide in purified oil. A good vaginal antiseptic powder, put up in 2- or 4-ounce packages, should be kept in stock. One teaspoonful dissolved in three pints of water makes the ideal douche. Patients visiting the office at intervals of days should be supplied and instructed thoroughly in their use. Copious hot astringent douches often work wonders.

The Operating Table and Preliminary Preparations

In "one-room offices" the table should be shut off from observation by a folding (enameled) screen. The physician should wear a clean white laundered coat when examining or treating patients, and it is desirable that his woman assistant wear a nurse's dress or at least a spotless white cotton overall and cap. Rubber gloves are desirable but not essential. Really clean hands are preferable, except, of course, when specific or pus cases are on the table.

The table being prepared, the irrigator half-filled with a creolin or bichloride solution (or both), and the pitchers containing hot and cold water, the instruments required should be placed, covered with a sterile towel, upon the instrument-table, and this and the irrigator stand be wheeled into position.

The doctor scrubs up with any good antiseptic soap, using the white basin, and then finishes by soaking his hands in his favorite germicidal solution in the blue basin. Meanwhile the assistant has placed

the patient upon the table and cleaned thoroughly the outer parts, first with soap and water, then with a creolin solution, and, if circumstances require it, with alcohol. She then covers the vulva with a sterile towel and the lower part of the body with a sheet. If the doctor has to do all this himself, he first roughly washes his hands, then prepares the patient and finally rinses off in the germicidal solution. For ordinary office examinations and treatments the procedures need not be extensive and take up but little time; if, however, any operative work is to be done, the preparatory technic must be as thorough as possible.

The instruments to be used, having of course been boiled or otherwise sterilized, are now placed in a basin and boiling water is poured over them. Any antiseptic of a noncorrosive character may be added. The writer still prefers creolin. Chinosol, however, is an excellent germicide and nontoxic. Carbolic acid, though of course cheap and very generally used, will be found decidedly objectionable in every way. A good lubricant—preferably in collapsible tubes-should be available: carbolized vaseline will meet the requirements, but some one of the sterile jellies prepared from chondrus crispus (Iceland moss) are infinitely better.

In any operative case, or if a douche is to be given, the patient should be placed upon a Kelly or similar rubber pad with drainage apron. The end of this should hang down into the slop-jar. The patient and doctor prepared and the instruments and dressings ready, it remains only to find out just what has to be done and do it in the most satisfactory manner.

Examination of the Patient

Naturally it is not essential to prepare extensively for an ordinary examination. It is quite desirable even here, however, to impress the patient with the care observed and the cleanliness maintained. Hence, as stated, the covering of the table should be fresh (at least a clean towel should be placed) for each case, and the doctor should not only carefully wash his hands but also the external genitalia of his patient before

proceeding to make the most simple digital examination. I am aware that it is not always possible to perform the latter part of the program thoroughly, but one can at least swab the outer parts with cotton pledgets and soap and water or a creolin solution. The vaginal canal may be left alone if a simple digital examination is to be made. If however even a speculum is introduced, swab and lubricate. If applications are to be made or extensive manipulation is expected, invariably flush the canal with creolin, bichloride or chinosol solution.

Before the patient ascends the table, the doctor will of course have obtained, by questioning and observation, as full clinical data as is possible. History-sheets are procurable at a nominal cost and every practician should utilize them. The essential points are: present symptoms, their character and duration; beginning of trouble; previous health; occupation; age; married or single; confinements; miscarriages; menstrual conditions; date of last menstruation; complicating disorders. It is also well to find out something about the patient's temperament, domestic conditions, husband's sexual habits, etc.

Further, bear in mind always the necessity of looking carefully for indications of disease in organs remote from the pelvis. If symptoms of cardiac, renal or gastro-intestinal disorders are present, examine these organs; in practically every case it is well to examine a specimen of the 24-hour output of urine. Numerous laboratories exist at which this work is done promptly and for a nominal fee.

From the preliminary conversation, the doctor will be able to discover the particular symptoms from which the patient desires relief; and even though a far more serious underlying disorder exists, it is well to remove the symptoms as rapidly as possible; the patient then realizes that "something is being done" and more readily submits to tedious or painful—but essential—procedures.

Before allowing the patient to leave the table, assure yourself (if at all possible) that you know definitely the cause of the symptoms she complains of. If the underlying

pathology remains obscure, relieve the most distressing condition to the best of your ability and arrange for a further and more minute examination. Remember always that the removal of symptoms does not mean the correction of the cause—to cure a disease it is necessary to overcome the basal disorder. While it always is essential to cure, if at all possible, it is also the part of wisdom to give relief at the earliest moment. Doctors who "get results" get the practice: the doctor whose results hold retains his patients-and converts them into enthusiastic boosters, besides. The man who merely secures temporary results, however brilliant those results may be, has a floating clientele always, and a great many busy detractors.

Details of the Examination

The woman (who may have been provided with a fan) having been placed on the table, the abdomen should first be examined. Proceed deliberately and familiarize yourself with conditons. Note abnormalities carefully, especially tender areas. Now examine the external genitals. If the patient is a virgin, use the fingers only and do not uncover her unless absolutely necessary. In every such case have a third person in the room. If ocular examination is essential, inspect the perineum, meatus, clitoris, and labiæ. Now make the vagino-abdominal exploration.

Occasionally, when some well-defined symptom is described, it is desirable to make a digital examination first, proceeding with the abdominal and vaginoabdominal exploration only if necessary. In such cases it not infrequently is preferable for the patient to stand erect. In office practice, however, the routine outlined will usually be followed. Instrumental examination is deferred till the last. Finally—provided conditions demand—the rectum is examined; first digitally and then, if desirable, instrumentally. A finger-cot should always be worn during rectal exploration.

Position of Patient During Examination

It is hardly possible, in an article of this character, to describe in detail the various positions the patient should assume. Brief-

ly, for abdominal inspection, the patient should be placed flat on her back with the head slightly raised and the knees drawn up enough to secure relaxation of the abdominal muscles. Not infrequently a satisfactory examination of the external genitals and vagina may be made in this position, the patient merely placing her feet in the stirrups attached to the side of the table and the operator dropping the leg-rests. This enables the doctor to stand immediately in front of the pelvis. If desirable, the head of table may be depressed and the slings applied; the woman's limbs are thus elevated, the pelvis tipped, and the intestines are moved toward the thorax. The vaginal opening, moreover, is brought on a level with the operator's chest, so that necessary manipulations can be made without stooping. For all deep pelvic manipulations this position is preferable; the limbs may of course be drawn backwards (knees flexed) upon the body to as great an extent as may prove desirable. During examination, the limbs should be covered with a sheet, the edge being turned back only just as much as is absolutely necessary.

The Sims, or "left-lateral prone," position is secured by placing the patient on her left side, with her left arm behind her and the chest turned toward the table as far as possible. The upper part of the body rests on the left breast, the hips are near the lower left corner of table and the body extends diagonally across toward the right side. The left thigh is drawn up till it forms an acute angle with the body; the right is raised still higher and allowed to drop over the lower limb. All constriction is removed from the waist line, as the object of the position is to allow the abdominal wall, intestines and uterus to fall forward. In this position a Sims speculum is readily introduced and a perfect view of the buttocks, anus, perineum, and vaginal orifice is secured.

This posture and speculum are desirable whenever the bivalve speculum fails to expose the cervix; whenever it becomes necessary to bare a lacerated cervix without separating the lips; when it is desirable to dress the cervix or vaginal fornices without

unduly distending the lower portion of the vagina or making tension upon the perineum i. e., when removing sutures or gauze drain from the cervix of a patient with repaired perineum; when sounding the uterus, making intrauterine applications or dilating the cervical canal; when packing the vagina to control hemorrhage or to support

the uterus; during curettage after miscarriage: by the use of the Sims speculum and position the necessary manipulations can be readily made with the least possible disturbance of patient; when incising, irrigating or dressing an abscess or sinus in the posterior cul-de-sac.

(To be continued)

Ingrown Toe-Nails

By BENJAMIN H. BREAKSTONE, B. S., M. D., Chicago, Illinois

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County Hospital; Consulting Surgeon to Mary Thompson Hospital

EDITORIAL NOTE.—This article is a continuation of Dr. Breakstone's interesting series in "Everyday Surgery." Every reader of CLINICAL MEDICINE should read every one of these papers.

THE subject of the management of ingrowing toe-nails is certainly of everyday interest. The trouble is exceedingly prevalent, and the afflicted individuals suffer excruciatingly, yet they

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Fig. 1. Anesthetizing the operative field

but rarely consult a regular physician, and I do not remember having attended a single clinic where a case of ingrown toe-nail was exhibited. For this reason, the field is left wide open for professional chiropodists, who, as a class, are ignorant of surgical technic, anesthetics and wound

treatment. One very prominent chiropodist of Chicago told me that he treats a great many physicians suffering with ingrown toe-nail, and they express surprise with what little pain this condition can be relieved, although chiropodists do not use any local anesthetic, as a general rule. A few of them are using anesthaine with

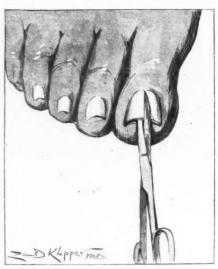


Fig. 2. Splitting the nail

very good results, but the less up-to-date ones employ a weak solution of carbolic acid as the only anesthetic. Infections occur very frequently following operations by these chiropodists, and then the patients are forced to consult a surgeon. From a financial point of view, it is surprising what large fees these specialists get for such a minor operation.

The vast majority of ingrown toe-nails occur on the inner side of the nail of the great toe, the skin and soft parts of which are forced over the nail by a tight shoe. The inner side of the nail, when the foot is in the shoe, then keeps on digging into the soft parts, making walking extremely painful. The patient as a rule is then crippled. Usually he tries to push the skin back with some kind of instrument and thereby infects this wound. Then



Fig. 3. Removing a portion of the nail

redness and swelling take place, there is a local absorption, when all the symptoms of an abscess are present.

Many methods of relief have been devised. Let us discuss some of the more common ones.

1. Filing of the middle of the nail, so that it is divided in half, is a very common method used by the laity. The object is to get the two separated halves to overlap each other at the middle, thereby relieving

the pressure at the sides of the toe-nail. This method is a very good one, but affords only temporary relief, as the nail grows together, and where it has been



Fig. 4. Dissecting nail-bed and matrix

filed in half an hypertrophy occurs, so that within several months that nail at that part becomes exceedingly thickened, necessitating more frequent paring and filing.

2. In the beginning, the trimming of the nail closely at the inner side and train-



Fig. 5. Curetting off matrix and nail-bed

ing the skin under the nail will give relief, especially if a wide shoe is worn and if this process is performed frequently.

3. Some surgeons merely remove the skin and soft parts, but that leaves the inner side of the nail free play, and its sharp edge then digs into the under side of that toe or the adjoining one.

4. The only radical cure is the removal of half, and in very bad cases, all of the nail, together with the nail-bed and matrix. This can be done bloodlessly as well as

painlessly.

This is the operation as preferred by myself: After going through the usual aseptic preparation of the part, a rubber band is applied at the base of the great toe, to act as an Esmarch constrictor, which will make the operation bloodless. Then the anesthetic—either a two-percent solution of cocaine or of anesthaine—is injected entirely around the nail, as is shown in Figure 1. While waiting for this solution to take effect, the instruments, consisting of a sharp scooped curet, scissors, and tissue-forceps, are prepared, and iodoform gauze, plain gauze, cotton, and a bandage got ready.

In ordinary cases, only half the nail is removed, but where it is ingrown on both sides, the entire nail is removed. In the vast majority of cases, however, only half of the nail should be removed. The scissors, therefore, are introduced in the middle of the distal end of the nail, and the nail is divided clear to the proximal end. Then, with the tissue-forceps or a stout artery-clamp, the nail is pulled off its bed, and out from the matrix. (See Fig. 4).

Now comes the most important part of the operation, which is the removal of the nailbed and matrix of the part of the nail removed. This is done either with the tissue-forceps and scissors or with the sharp curet. If infection is present, you must curet away or dissect away all of the infected tissue. In order that the nail may not again grow, you must be sure that not a particle of the exposed matrix and nail-bed remains. Next the wound is filled up with iodoform gauze, dressed with plain gauze, a narrow gauze bandage applied, which is held in place by adhesive plaster, and then the rubber constricting band is removed. The patient now will be able to walk home. This simple operation can be done in any office, and, as here described, it is absolutely painless. The wound is not redressed for several days; and after two or three such dressings the patient is completely cured.

Scarlatinal Nephritis

And How Best to Treat It

By HENEAGE GIBBES, M. D., C. M., L. R. C. P. (Lond.), Mc Alester, Okla.

EDITORIAL NOTE.—This paper is the first of a series of three upon the different forms of nephritis. Of this subject, as of many others, Dr. Gibbes is a master, his therapeutic conclusions being drawn from an intimate acquaintance with the pathology of the disease. His articles will richly reward careful study.

SINCE the time of Cotugno, who first discovered that the urine of dropsical patients sometimes contained albumin, and which he considered resultant from an altered condition of the bloodserum, up to the present time, the classifications suggested have been many and various. Dr. Blackall of Exeter, England, was the first observer who connected albuminuria with actual disease of the kidney. A few years later Dr. Bright worked out this idea with such a degree of completeness

that his name has ever since been associated with disease of the kidney. Dr. Bright distinguished one form, but three varieties, of diseased kidney as associated with albuminuria, and considered that each variety was only a stage toward the development of the complete form, which he considered was the "granular kidney." I have for a period of thirty years, or longer, been systematically collecting diseased kidneys, and grouped them according to the diagnosis of the cases.

It would be of no use to go over the views held by Johnson and others. As to Dr. George Johnson, I worked with him on kidney disease, and he had a fixed idea and everything had to be fitted into this idea.

Now, when a man has the most elementary knowledge of the normal histology, it is obviously absurd for him to make out a theory based on the morbid changes in an organ when he has but the very slightest knowledge of its normal condition; and, yet, this is what is being constantly done. The normal histology of an organ is the most important consideration for any man to know before he attempts to describe a pathological condition in that organ, and next to that is the function of that organ normally, then, with a thorough knowledge of structure and function, a man is prepared to understand the change that disease has produced.

My Study of Diseased Kidneys

Having accumulated a number of sets in the shape of diseased kidneys, they were all carefully hardened, then sections were made, each kidney being kept separate and sections made from different parts of it. Each kidney was taken in turn, being grouped according to the clinical diagnosis. The sections, after staining and mounting, were examined and the conditions entered in a notebook. After this had been done in a number of cases, they were labeled and numbered and placed in the group to which they belonged. In this way it was comparatively easy to work out the morbid histology in each case and see where the departure from the normal had taken place and what its nature was.

The group that came under the heading of scarlatinal nephritis was separated and a number of sections of each case were examined, written up, and then compared under the microscope. In this way, a number of cases can be compared and the true pathologic change worked out, as there is generally more than the actual morbid change in the histology required to account for death in some of these cases.

Now, what is the change in the kidney that we find described by some writers as nuclear masses? There certainly are nuclear masses, but if we make a careful examination we shall find that these nuclear masses are made up of leukocytes.

What has happened is this: In scarlet-fever we have a poison. How it is generated we do not know; but it produces the exanthem with which we are all familiar. This toxin has to run its course, and then has to be eliminated from the body mainly by the kidneys. If this toxin has not been modified in any way by treatment, it will, as it passes through the kidneys, possess such irritative powers that it will cause a reaction of the tissues in the kidneys, and scarlatinal nephritis will ensue.

A microscopical examination of wellstained sections will show the whole process, as there are always some parts where the irritative action has not advanced far and has not been intense, and we are able to see that we have a simple old-fashioned case of reaction of living tissue to a substance that is able to cause an irritation. In other words, we have all the conditions of an inflammatory focus. The toxin in the blood, as it passes through the blood-vessels of the kidneys on its way to the hilum and ureters is able to set up a reaction of the tissues surrounding the blood-vessels. You can also make out where stasis has been produced, in fact if you put a section of the kidney under the microscope and bring one of these inflammatory foci into the field, while under another microscope with the same magnifying power you put a section which contains an inflammatory focus from any other part of the human body, you could not tell which was which. They are both examples of simple inflammation.

The Best Treatment

A case of this kind is best treated by rest in bed at once, dry caps over the loins and a saline laxative in the morning. Also bland liquids to drink. Most of these cases of simple inflammation can be well treated if these points are attended to firmly and kindly; rest in bed, dilute the blood with cooling drinks, keep the bowels open, and keep the body cool by sponging—the latter is generally better than a warm bath, as it

can be given often, parts of the body can be sponged at a time, and the whole body need not be exposed. When the fever runs high, give the defervescent compound, if the patient is strong, or dosimetric trinity, if he is weak and run down. Give a dose frequently to effect. If a case is watched, on these lines and is carefully handled there need not be any untoward results.

Dealing With Microbic Infection

But in some cases we have another element to deal with and that is microbic infection, which unfortunately occurs only too frequently. All the symptoms are intensified, and here the question of using a serum arises. The most frequent infection is by a streptococcus, and some men certainly seem to get good results by the use of an antistreptococcus serum. This question of the use of a serum must be left to the physician and the individual case.

I think the majority of general practitioners do not quite realize how very easy it is for a human being to become infected by some microorganism, and that, if this takes place and the resisting power of the individual or of some of his tissues is lowered, we have the condition of the chain which gives way at its weakest link.

We must remember that every time we inhale the surrounding air we are taking in whatever that air may contain besides the oxygen which, by the law of the diffusion of gases, passes from the terminal acinus (the expanded end of the bronchiole) into the blood which is circulating through a plexus of capillary blood-vessels on the outside of the wall of the acinus. The structure of our breathing apparatus is arranged for this purpose, that is, for the interchange of oxygen and carbonic acid. We must remember, however, that with the column of air that we breathe into our lungs we also take in whatever minute particles there may be suspended in that column of air. In the acinus (the terminal of the bronchiole) there is always a certain amount of residual air, that is, the whole of the air is not expelled from the bronchiole at each expiration.

Now, if we take, for example, a particle of carbon that is floating about in the air and we breathe it into the lungs during respiration, it passes on into the residual air and would remain there but that there is a route by which it can go farther. The acinus, or expanded end of the bronchiole, is made up of flat cells set edge to edge and cemented together by the cement substance which unites all cells in the body. On the outside of this sac there is a network of capillary blood-vessels and the interspaces of this network are filled with lymph.

Now, the lymphatic circulation is not a closed system, but is always from the periphery toward the center. The particle of carbon which we left in the residual air has to pass through the wall of the acinus and then into the lymph stream, which carries it to the thoracic duct and into the blood circulation. To get out of the acinus and into the lymph stream, it passes through one of the foramina in the ball of the acinus called "pseudostomata," or false openings. If we substitute a microorganism for the carbon particle we have been using as an illustration, we can easily see how the most deadly microbe can pass directly from the surrounding atmosphere into any part of our body with the circulating blood. If all microorganisms were as deadly as certain armchair theorists would make them, there would not be a living soul on this earth within forty-eight hours.

Different Forms of Nephritis

With regard to the different forms of nephritis, the classification I have adopted seems to me to be clear, practical, and based on actual conditions.

1. Acute diffuse nephritis. Termination, death or recovery.

2. Acute parenchymatous nephritis. Termination, recovery, or passes into the following:

3. Chronic parenchymatous nephritis. Termination, recovery, with portions of the cortex changed by the formation of fibrous tissue and the kidney damaged to the extent of this change.

4. Chronic interstitial. Is chronic from the beginning, ending in the granular kidney, or true Bright's disease. To induce

this condition, something sets up a chronic irritation of the connective tissues and causes to grow and form new connective tissue. This acts as does all connective tissue formed under abnormal influence. It contracts, and by its contraction it destroys the tissues which are involved. This is the gouty form, and the others which have received different names.

The kidneys, after scarlatina, must be constantly watched for some little time. but if the child is given plenty of liquid and the bowels are watched for any sign of constipation, using a saline laxative freely, trouble may be averted. It must further be remembered that no two cases are alike, and each must be treated on its merits, as we are apt to stumble on some idiosyncrasy when we least expect it.

Acute Scarlatinal Nephritis a Simple Inflammation

I think we should fully realize that a nephritis occurring in a case just recovering from scarlet-fever is merely a simple inflammation caused by the reaction of living tissues to an irritant, and treat it as such, always bearing in mind the possibility of an added microbic infection that may entirely alter the condition. In that case, I should certainly try the antistreptococcic serum. Recently I met a friend who has a large practice and he informed me that for some time (three or four years) he has used no other treatment, and his results were above the average.

I hope I have succeeded in making the pathology clear, because it is on the pathology that the treatment must be based.

- 1. Scarlatinal nephritis is a simple inflammation, and the patient either gets well or dies.
- 2. Acute parenchymatous nephritis is a catarrhal affection of the secreting tubes, which either disappears or becomes chronic.
- 3. Chronic interstitial nephritis is one which is chronic from the beginning, where fibrous connective tissue is formed which gradually contracts and destroys the functionating power of the organ.

By taking these three forms of kidney disease, it ought to be a simple matter for the physician to decide to which class the case belongs. There are two acute and one chronic. We may leave out the one chronic form, as it has nothing in common with the other two. It is a most insidious disease, and it is rare to find out when it commenced. It is this form to which so many different names have been

applied.

Of the other two forms, it is generally easy to decide if we bear in mind that scarlatinal nephritis is a simple inflammation and that this condition, which is the reaction of a living tissue to an irritant, will in a short time so fill the organ with inflammatory products as to be incompatible with life. This is the time when the alert physician gets busy, as he has little time to get those irritants removed and so enable the organ to carry on its function. Dry-cupping comes in as the first and handiest form of counterirritants; if you have no cupping glass, a wineglass or small whisky-glass will do. Prompt work will often save the patient, and it is the resourceful physician who succeeds in these cases.

Acute parenchymatous nephritis is so well described in most of the good textbooks that a man can in a short time inform himself of the characteristics of this disease. But it is in those books where the compiler has attempted to fit a pathology of which he knows comparatively nothing into a disease of which he is a thorough master clinically that the man seeking for information comes to grief. He cannot make out what this author is driving at, and he throws down the volume in disgust. Now, if he will remember that the function of the kidney is interfered with by the products of inflammation, he must be a duffer if he cannot go to work and counterirritate to such an extent as partially to free the organ and give it a chance to perform its function, at the same time using medicaments to assist those measures. And if he is well versed in the use of the active principles of medicine, he can count on obtaining brilliant results in some apparently hopeless cases.

The Treatment of Cholera

A Review of Past and Present Methods

By WILLIAM F. WAUGH, A. M., M. D., Chicago, Illinois

Senior Dean and Professor of Therapeutics, Bennett Medical College, Chicago, Illinois

THE presence of Asiatic cholera at the New York quarantine, and its general prevalence throughout Italy, whence we are receiving many immigrants, makes it desirable that we should overhaul our means of combating it while as yet we have the time. I shall not take up space with the usual textbooks that stand on every doctor's library shelves, too often compiled by men who have not had the experience of a solitary case, but shall ask what has been done in this malady by the advocates of direct medication.

The research is especially interesting, as Burggraeve's attention was first directed to the use of minute doses and the employment of the alkaloids by the reports of Mandt, a Russian physician, of his experience with nux vomica, rhus and other drugs in small doses in the treatment of cholera. His success won for him the support of the Czar Nicholas, and the jealousy of his confrères, who after the death of his imperial backer drove Mandt out of Russia, and he died broken-hearted in exile.

Beware of instituting momentous reforms in medicine, unless you are the type of man who, knowing you are right, will not let yourself be downed.

The epidemic of the early nineties gave European clinicians abundant opportunities to observe cholera, and put to the practical test the old and new suggestions as to treatment. These were numerous. Garau enumerated the following:

The Multitude of Remedies for Cholera

Absinthe (Ribes), ammonium acetate (Andrel), lead acetate (Dupuytren), nitrous acid (Kennedy, Hope), aloes (Guillemin), ammonia (Levicaire, Kingley), arnica (Ebstein), asafetida (Fourguemin), cold beer (Baumgaertner), belladonna (Viardin, Halmagrand), bismuth (Serres, Wolowski), camphor (Burggraeve, Andral), sodium carbonate (Blume, Davier, Despine), char-

coal (Biett), colocynthin (Colmiak), potassium chlorate (Davier, Despine), vapor douches (Biett, March, Bierstein), cold baths (Recamier, Jadelot), water, 30 to 40 pounds in 24 hours (Peyron), oxygenated water (St. Ange), electricity (Bierkonski, Zugle, Twudal), succinated spirit of ammonia (Brema), ether (Andral), extract of columbo (Hope), internal and topical cold (Salomon, Rigeaux, Mueller), guaco (Pereyra), oil internally and externally (Desavenieres), cajeput oil (Brema), castor oil (Anderson), sulphureted hydrogen (Kungley), ipecac (Guerin, Kuolz), iced lemonade (Dance), ammonia frictions to spine (Gerdy), cantharides-vinegar liniment (Andral), calcined magnesia (Poulain), musk (Burggraeve, Biert, Levestamm), snow (Academy of Paris, Larrey), nux vomica (Prague), opium (Delpech, Geurin, Hubenthal, Gérich Blume, Biett, Levestamm, Rankin, Sachs, Eckstein), oxygen (Coste), Riviere's potion (Gérich), nitrogen protoxide (Lepage, Kungley), hot punch (Magendie), quinine (Sachs, Bonnafoux, Andral), blood-letting (Academy of Paris, Hubenthal, Serres, Wolowski, Broussais), salt internally and intravenously (Latta), strychnine (Jankens, Abeille, Fontaine), aluminum sulphate (Sanson), sodium sulphate (Baudelocque), zinc sulphate (Brauer), tartar emetic (Blume), tincture of rhatany (Rohrer, Dudon), transfusion of blood (Dieffenbach), valerian (Brema), dry-cups (Dance).

These treatments, introduced between 1849 and 1884, resulted in a mortality of 75 to 80 percent in the early days of the epidemic, with 20 to 30 percent toward its end

During the epidemic of 1884 Burggraeve contributed the results of his studies during five previous epidemics.

The attack of cholera makes its debut with vomiting, cramps and colics, general sideration, lowered circulation and respiration, skin cold and covered with gluy perspiration, voice broken, eyes sunk in the orbits, black circles around the lids, discolored skin and advancing cyanosis. All these signs show that the cholera toxin is acting at once upon the cerebrospinal nervous system and upon the great sympathetic. The blood ceases to circulate and the body heat concentrates in the interior, hence the inextinguishable thirst that torments the patient, the epigastric heat, the cramps in abdomen and limbs, the increasing paralysis of internal organs, and the suspension of hematosis, that is, of the interchange of oxygen and carbonic acid.

In all the necropsic signs one can not fail to recognize spasmodic asphyxia.

There are degrees: choleras humid and choleras dry, foudroyant and oscillant forms, the character depending upon the intensity of the attack and the resistance of the individual.

Prophylaxis has for its object prevention of the functional troubles that precede cholera, i. e., the abdominal derangements, loss of appetite, pasty mouth, bilious diarrhea, with lassitude, vertigo and headache.

When cholera finally appears the nerve symptoms are quickly carried to the highest point, such as cramps, intestinal colics, precordial anxiety, and dejections, by vomiting and purging, of rice-water consistence.

Heat leaves the extremities, the tongue is cold, icy; the pulse falls and becomes filiform, the secretions are suppressed.

Analyzing these troubles, we have: (1) Those of innervation; (2) those of respiration; (3) those of exhalation and secretion.

Of the first, the nerve lesions are determinant. They proceed from the ganglionic nervous system or the great sympathetic, extending to the cerebrospinal system, as shown by muscular cramps, anxiety and moral malaise.

The respiratory symptoms consist in cessation of the action of the great sympathetic upon the lungs. The vagi do not influence the chemical action but rather the sensibility and contractility of the bronchi. In dealing with choleraics, one is struck by the coldness of the expired air, the general cold, and the nonconversion

of venous blood into arterial. The characteristic respiratory phenomena of cholera therefore indicates paresis of the great sympathetic nerve, or ganglionic sedation. Camphor raises the bodily heat, stimulates the mental faculties, and renders the pulse full. The effect is rapid when administered by the rectum. Perspiration and the secretions are activated.

The Prophylaxis of Cholera

For the antecedent diarrhea Burggraeve commenced with saline laxative, which he did not look upon as coming under the rule of shunning purgatives. He sought to produce a simple intestinal lavage to remove fermentable materials. This should be done by a dose given in early morning. At each meal he advised quassin and sodium arsenate to promote the flow of bile, which in cholera was suspended, as well as the secretion of urine, leaving the blood thick and incapable of circulating properly. The saline refreshed the blood and favored oxidation. The latter also may be favored by the use of oxygenated water as a drink.

Between meals he advised monobromated camphor, two or three centigrams; or camphor and musk; at bedtime three granules each of his triad, aconitine, digitalin and strychnine arsenate, to increase the vitality and free the secretions. These are the preventives to be used during cholera prevalence.

Burggraeve justly attributed prophylactic power to the morning dose of saline laxative, washing out the bowel, increasing the appetite, rendering the secretions more saline, the muscles firmer, the blood circulating more easily and the congestive vertigo to which he was subject disappearing. These results were due to the exosmosis occasioned, ridding the blood of toxins and preventing the absorption of fecal material. Taken while still in bed, the saline acts on the bowels; if the user takes exercise just after swallowing the dose it will act as a diuretic and diaphoretic.

Practising in malarial localities, Burggraeve sought to prevent cholera by giving quinine sulphate, two grains morning and evening. Naturally, to one meeting malaria at every turn the thoughts become tinctured with quinine, and it seems always indicated. For enteralgias and abdominal pains Burggraeve gave quinine

hydroferrocyanide.

Burggraeve observed that metal workers were usually immune against cholera. The metallic oxides and acids cure intermittent neuroses rebellious to cinchona. Copper, iron and arsenic are especially effective. The economy seems to receive from these an unaccustomed power of resistance. Workers in copper were not affected by cholera in Ghent or in the Russian mines. Burg confirmed this by extended researches, and advised wearing over the stomach a plate of copper and steel, which left on the skin stains of oxide. Dumont found that of 150 persons wearing these plates during a cholera epidemic not one was attacked with the slightest abdominal disorder. All "tasted copper."

Treatment of the Attack

The treatment is that of the drowned. The patient is placed naked on a bed before an open fire, the windows open widely, and wrapped in the upper sheet wet with strong salt brine, well wrung out. Energetic frictions are to be made with camphor in alcoholic or oil solution.

For the vomiting and cramps he gave strychnine, Gram 0.0005; monobromated camphor, 0.002; cicutine, 0.002; if necessary adding atropine or hyoscyamine, Gram. 0.00025. Gelseminine is indicated, as in tetanus, cholera being in effect an asphyxic tetanus. To calm the thirst, bits of ice are placed in the mouth at intervals. By these means the cold stage is abridged.

As heat returns to the periphery, the attention and energy should be redoubled, for infrequently these have to deal with a true typhoid state, especially if stimulants have been abused in the cold period. Jacquemont saw the vomiting and diarrhea increase with every dose of his hot potion. Since the first epidemic of cholera, the essential oils have been abused, to the point of burning the gastric integument. Every druggist has his anticholera mixture, which he prescribes without the doctor.

Reaction is sustained by the alkaloidal excitomotors, for the internal organs are

still asphyxiated by the suspension of hematosis. External measures should be applied to the chest, frictions, dry-cups, electricity; the strychnine being continued. As the peripheric circulation is established, and the axillary temperature reaches 102° to 104° F., add veratrine, cicutine, digitalin, a granule of each every quarter-hour; then every half-hour, then every hour as the reaction is more declared by the restoration of the pulse and respiration and the color of the skin.

The hot stage ending, that of sweating begins. It is dangerous to allow the patient to exhaust himself in transpiration. Besides the risk of chilling, it is profoundly debilitant. Replace the bedding with dry linen, cover lightly and give a little bouillon, hot aromatic wine or punch. Because these cases are neglected many choleraics perish when they are believed safe. Sleep soon comes, and is restorative; it should not be disturbed unless it be considered too prolonged.

The choleraic paroxysm passed, its return may be prevented by quinine, the arsenate or hydroferrocyanide, three or four granules every half hour, gradually diminished as the danger subsides. This is rendered advisable by the affinity between cholera and intermittents, existing in the low countries, where Burggraeve practised. It must be understood, though, that massive doses of

quinine are to be shunned.

The External Treatment of Cholera

The external treatment of cholera has for its object to provoke reaction and bring about remissions, during which periods febrifuges may be administered with at least some hope of success.

Artificial heat and hydrotherapy are useful to sustain or arouse vitality. Durant applied to the spine a thick strip of flannel wet with turpentine, over which he passed a very hot iron—an effectual means of arousing consciousness and the vital forces. This was followed by hot affusions. The degree of heat that can be borne in this condition is remarkable. Petit employed this method, applying ammonia and turpentine, and repeating until blisters formed.

(To be continued)



PLEASE CONTRIBUTE

You are invited to contribute items for this department. Write down on a postcard one of the "kinks" which have given you practical help and send it to us, and "we'll do the rest." Let's crowd all the helpfulness we can into these pages of "Therapeutic Notes."

TO PRESERVE RUBBER INSTRUMENTS

Talj, investigating the various means suggested for preserving rubber instruments, finds the best to be exposure to the vapor of ammonium carbonate.—The Military Surgeon.

THE USE OF SACCHARIN IN FOOD

The use of saccharin in food has been forbidden by the Secretary of Agriculture, this ruling taking effect on July 1, 1911. The Referee Board appointed by the Secretary declares that the continued use of saccharin for a long time in quantities over threetenths of a Gram per day is liable to impair digestion.

MAGNESIUM SULPHATE IN THE TREAT-MENT OF DYSENTERY

Dr. A. A. Barge in *The Therapeutic Digest* says that on the first appearance of mucus and blood in the stools the patient should be put to bed and given an exclusively liquid diet. An enema of a quart of warm water that has been boiled, to which two heaping tablespoonsful of magnesium sulphate have been added, should be administered at the beginning of treatment, this being introduced through the hard

rubber tip of the fountain syringe never with the colon tube. This enema should be repeated every four hours until the passages are free from blood and mucus and the patient free from pain. In addition, the patient should be given magnesium sulphate internally every two hours until the acuteness of the symptoms has subsided. Dr. Barge usually adds a little deoderized tincture of opium to the magnesium sulphate, taken by the mouth.

HEROIC TREATMENT

Beverly Robinson states that a man is free from hay-fever while in England. He does not tell us which of the two evils the patient preferred.

P. S. English exchanges are requested *not* to copy.

SUGAR AND HEALTH

The increasing consumption of sugar, according to American Medicine (April, 1910), is at last receiving the attention of physiologists in many parts of the world, and the general opinion seems to be favorable to this change in habits, because it is economical to relieve the digestive apparatus of part of its labor of digesting starches. The change has been so recent that there is not yet time to tell what harm, if any, can result.

The possible atrophy of the tissues which produce the starch-hydrating enzymes need not worry us. Indeed, it would not be disastrous if we entirely lost our power to digest starch, for sugar production is quickly becoming amply sufficient to replace the starches, though, of course, such a change in physique is not a matter for

a day, but a slow change requiring millenniums.

Nevertheless, there is a danger which has already been recognized. When starches are eaten, the sugar is slowly produced, and always exists in very weak solutions; but when sugar is eaten, particularly the absorbable varieties, it is apt to be in strong solution that is more or less harmful.

Very strong solutions of all the sugars seem to be used in nature, as well as in our kitchens, as antiseptics, to preserve other foods, for they are very injurious to living tissue. It is now said that sugar-eaters suffer unduly from inflammations of the intestinal tract and liver. We have called attention to this fact before, and it seems important enough to repeat, now that sugar diet is receiving high praise, which will doubtless lead many to indulge unduly.

HEXAMETHYLENAMIN FOR COLDS IN THE HEAD

Dr. Austin Miller, in *The Journal of the American Medical Association*, June 10, 1911, says that, in view of the reported excretion of hexamethylenamin in the saliva and by the middle-ear and bronchial mucous membrane, he has been giving it for the past year in the treatment of common colds, and finds that this agent acts promptly and efficiently. The irritating watery secretion stops; the fever, aching, and malaise of influenza ceases, and the threatening disease is generally averted.

The hexamethylenamin should be administered at the earliest possible moment; that is, just as soon as the nose begins to feel stuffy or the discomfort begins. If used later, the results are less gratifying, possibly on account of the presence of the mixed infection during this stage.

At the onset of a cold, Dr. Miller used 15 grains of hexamethylenamin four times in the twenty-four hours. Copious water drinking is encouraged, which lessens the possibility of bladder irritation, this being the only ill effect of the drug which has been noticed. He thinks that as a cure for colds it may prove as great a boon as it has been shown to be as a urinary antiseptic.

Hexamethylenamin is the same as hexamethylenetetramine, which is a condensation product of formaldehyde and ammonia i. e., $(CH_2)_\theta$ N_4 . It is known by various other names, urotropin representing one of the purest grades of the preparation.

THE DIGESTIBILITY OF CHEESE

The United States Department of Agriculture has been investigating cheese, to find out whether it is digestible or not. There has been a popular impression, pretty wide-spread, that it is not readily digested, and is likely to induce intestinal disturbances. Experimenting with a number of young men in good health upon a diet of American factory, or cream, cheese cured for different lengths of time and eaten with bread or fruit in quantities varying from one-third to one-half pound per day, it was found that on an average more than 95 percent of the fat and more than 95 percent of the protein of the cheese was digested, and over 90 percent of the energy available for the body. Thus, cheese was found to be just as digestible as meat. Furthermore, the subjects did not tire of the diet, and in no case was constipation, indigestion or any other symptom of physiological disturbance noted. Similar results were obtained with cottage cheese, which, when made from skimmed milk and enriched with cream, was pronounced "a cheap, digestible and nutritious food."

COLORLESS IODINE OF NO VALUE AS A SKIN DISINFECTANT

Willmott Evans (cited in Merck's Reports, 1911, July), in an article on the value of iodine as a disinfectant of the skin before operations, states that, in all the various external applications of iodine, attempts are often made to employ one of the "colorless iodines," and points out the fact that so-called colorless iodine has very little antiseptic power.

Iodine solution is "decolorized" in several ways: by the use of any of the alkalis, by carbolic acid, by sodium thiosulphate, and by sodium sulphite, but in every one of these methods the iodine enters into combination and thereby loses all or the greater part of the antiseptic power for which it is chiefly employed. For instance, if potassium hydroxide is used, potassium iodide and potassium iodate are formed, no free iodine being left; and it need not be said that neither the iodide nor the iodate of potassium has any great antiseptic power. Therefore, these "colorless iodines" are useless for sterilizing the skin, and, in fact, they are of very little value for any purpose.

PRURITUS AND TABES

A writer in *The Lancet* calls attention to the relation between pruritus and tabes. Milian found such a connection in six out of 25 cases. In these the pruritus was localized, lasted years with exacerbations, and was always an early symptom, and in incomplete cases, never in ataxia. Others found the pruritus in advanced ataxic cases.

The writer in *The Lancet* stops too soon. He fails to appreciate that the connection is due to the fact that tabes and pruritus are both caused by fecal retention and decomposition; the ataxia by the action of fecal toxins upon the delicate structures of the spinal cord, the pruritus by the local irritation of skin or anus by these same toxins undergoing elimination or coming in contact with the perineal tissues.

TREATING SNAKE-BITES

Dr. I. C. White, of Smithville, West Virginia, writes that when he is called to see snake bite, he scarifies the orifice made by each tooth or fang, and then applies to the wound a small piece of cotton saturated with ammonia water. This is renewed every few seconds, being freshly saturated with the solution every time. Internally, he administers a mixture containing tincture nux vomica, tincture iron chloride, and water.

Under this treatment his patients have invariably recovered very quickly. One boy who had been bitten five times by a copperhead snake, went to sleep in less than one hour after he received the treatment. Dr. White says that he finds many persons who have been given whisky after being bitten, who are so drunk when they are first seen by the doctor that they cannot speak nor hardly swallow. In these cases he administers ammonia water in 15-drop doses by the mouth, letting them inhale some of the same substance. This will sober the patient very quickly.

COLCHICUM AND GOUT

The experimental pharmacologists have recently arrived at the conclusion (after elaborate experiments on dogs and other animals which never have gout) that colchicum acts only as an intestinal irritant and, therefore, can not influence the course of gout. This view received an effective kibosh from the pen and mouth of Prof. Hare, who in his address before the Ohio State Medical Society, this year, said:

"With the statement that 'colchicum does not cure gout' it seems hardly worth while to deal. We may not know how it cures gout, because the pathologist at the present time can not tell us what gout is, but there are thousands of medical men, and thousands of laymen as well, who know that colchicum does cure gout, or to speak more correctly, relieves an attack of gout, although it may not permanently correct the metabolic disorder."

To this we might add that there are thousands of physicians who can testify with equal certainty concerning the efficiency of the alkaloid of colchicum, cochicine, in the relief of gout and the "gouty" conditions.

CALOMEL AS A CHOLAGOG

Our fathers looked upon calomel as our best cholagog, and when they wanted something that would powerfully "stir the liver" they turned naturally to this remedy, as the best one at their disposal. During the last few decades our pharmacologists have told us that the drug did not have this action upon the liver. It is, therefore, of interest to note that there is a tendency to return to the essence of the old view. In a recent address, in which he refers to certain

well-known experiments, Prof. H. A. Hare said:

"There is no question whatever that in these experiments the administration of calomel has not caused an increased flow of bile through the fistula, but this does not prove that calomel does not cause an increased flow of bile into the intestines. It may not stimulate the liver, but may have some action on the gall-bladder whereby that viscus is emptied. But whatever may be the modus operandi, it may be asserted that if he will take a saline purge, thereby sweeping the contents of the duodenum out of the bowel, estimate the quantity of bile passed, and some days later take a full dose of calomel, or blue mass, and estimate the quantity of bile passed, he will find that, no matter however clever his mental deductions may seem to be, his biliary secretions will be increased more by the calomel than by the saline. After five or six copious biliary dejections have occurred the lower end of his alimentary canal will convince his brain that it is in error when it thinks that calomel does not increase the flow of bile."

THE FLEXNER SERUM FOR MENINGITIS

It is said that the Flexner serum for the treatment of cerebrospinal meningitis is not yielding the results anticipated for it by its discoverer. Flexner claimed cures in 75 percent of cases. In spite of this fact, the reports of the New York Health Department show that since 1907, when the Flexner serum was introduced, the percentage of fatalities has increased from 82.1 percent to 97.3 percent. The value of this substance is still sub judice.

TO PROTECT FROM MOSQUITOES

In a Bulletin issued by the United States Department of Agriculture, it is said that the most effective mixture was that sent the Department by C. A. Nash, of New York. It was as follows:

Oil of	cit	rone	ella.						.OZ.	1
Spirit	of	can	pho	or					.oz.	1
Oil of										

A few drops of this mixture on a bath towel hung over the head of the bed will keep the common house mosquitoes away. When they are very abundant and persistent, a few drops may be rubbed on the hands and face. Towards morning, it may lose its efficiency, and as the mosquito often bites worse about daylight, when the individual sleeps soundest, it is well to renew the application during the night.

THE RELIEF OF GALLSTONE COLIC

Dr. Samuel Floersheim of New York points out in *The Medical Council*, July 1911, the danger of overdosing with morphine in seeking to get relief from the suffering of gallstone colic, the danger being that a very large dose may be administered just before passing of the stone, after which the sedative would not only be unnecessary but dangerous.

May we suggest that a much safer combination for the relief of this condition is that of hyoscine, morphine and cactin, which alleviates the pain, in a dosage which is relatively far more safe than morphine alone, or morphine and atropine combined. In the mild cases, the "antispasmodic triad" of strychnine arsenate, hyoscyamine and atropine is effective.

A SECRET OF SICKROOM SUCCESS

"My successful medication," says Dr. Robert Gray in The Therapeutic Record, "is due entirely to my knowledge of chemistry and pharmacy and the employment of none but the highest grade substances, direct from the manufacturers, dispensed myself, and personally administered in the treatment of desperate cases; the only method to acquire the utmost knowledge of the physiologic limit of recognized chemicals. This is the source of my faith in my treatment; the faith patient and family have in me and my medication, and the mysterious influence that suggestion exercises, do the beautiful work I see accomplished in the sickroom, where there is not one favorable shade of prognosis."



Nervous Dyspepsia

III

MILK in its natural state and eggs not absolutely fresh are quite often contraindicated in the diet of patients suffering from atonic dyspepsia because of the flatulence which they provoke. I have often seen this in the victims of an ovolactic diet, as well as among those who take mineral waters as their exclusive drink. I counsel regular repasts well chewed.

"We have thirty-two teeth," said Andrew Clark, "which is the reason why every mouthful should get thirty-two bites with the teeth. I also advise that the interval between the three meals should be five hours. As drink I permit the atonic patient, if he or she is not too nervous, a quart of old red Bordeaux thinned with three quarts of weak hot tea. Hot drinks stimulate the act of digestion, diminish the sense of heaviness, favor the activity of the ferments and the molecular dissociation of the fats.

The bread should be either stale or toasted or replaced with zwieback (bread sliced and browned in the oven). There is no harm in introducing in small quantities the following articles into the diet of the atonic individual: lean oysters, smoked ham, lemons, old wine, vinegar, parsley, thyme, laurel, truffles, cinnamon, vanilla, cloves, and diffusable antispasmodics and stimulants. As soups the best would be fat-free bouillon as a base, into which chopped vegetables may be introduced, then thickened with rice flour or barley or dough. Meats should be tender and well cooked; gelatinous meats, brains, calves' sweetbreads, young turkey, fresh partridge, quail and lark may make up the menu, without fat or piquant sauces, and without ragouts or fried things. All vegetables should be mashed with butter. The most digestible vegetables are salsify, chicory, crosnes, [crosne, Japanese labiate plant with an edible tuber. It is a winter vegetable.—"Dictionnaire Petit Larousse"], cardoons, carrots, peas, greens, and lentils.

He that eats and swallows quickly digests slowly. The tachyphage becomes a dyspeptic. But, on the other hand, slow eating (bradyphagia) is quite often the provoking cause of habitual air swallowing (aerophagy). The longer one masticates, the greater chance he has of swallowing air. In medio virtus. In almost all nervous dyspeptics there is need of reeducating the appetite and the digestion. These patients have the deplorable habit of depriving themselves gradually of all aliments, which they regard one after another with suspicion, as hurting them. The anorexia is at first voluntary and elective but gets to be quite morbid and general. Among these dreaders of food (sitiophobics) we find those of perverted taste, who are a prey of irra-, tional desires (pica, malacia) and the syrmiacs [Greek syrmos, vomiting, and syrmaie, an Egyptian emetopurgative made of the juice of a certain radish mixed with salt water.—GLEANER], who like the old Romans make themselves vomit whenever they feel the least heaviness after a meal. All cases of that condition are quite amenable to psychotherapy.

Gastralgia has often occurred in consequence of some mental and moral shock preoccupying the mind. In the young, gastralgia is often the sign of anemia. It

follows readily the grip and prolonged wetnursing of infants. Here too is the neuropsychic treatment of far greater importance than eupeptic medicaments and restricted diet. To sum up the matter, we should say that we have here a hyperesthesia of the solar plexus. This diagnosis is frequently impossible to be made except by exclusion, i. e., when we have ascertained that the pains in the walls of the stomach and the intermittent cramps, which come more frequently than usual while it is empty, do not depend on the presence of either a round ulcer, nor on a stenosis of the pylorus, nor on hyperchlorhydric troubles, nor on any lesion of the liver, nor on a congestion of the appendix.

At the time of a painful attack I counsel giving simultaneously a granule of Gregory's salt, a granule of atropine, and one of cannabin, which medication should be repeated in case of persistance of the pain. If the attacks continue we order tepid douches, with interrupted jet, on the spine, during ten or fifteen days, one minute every day. If this fails then a fly blister at the epigastrium, left on for four days, constitutes a most favorable revulsive. Internally the medicament that served best was sodium chloride in solution of 10 percent, two or three tablespoonfuls in twentyfour hours. I explain the sedative power of this salt by its topical action on the gastric mucosa, which must be affected at times with herpetic epithelial desquamation.

Errors of diet are most harmful for gastralgic patients, yet we may permit them a sufficiently large diet on condition that they exclude all crude and irritating aliments, such as acids, spices, condiments and stimulants, articles rich in tannin (as tea or red wines), ice, beer of poor quality (very rich in dextrin), and medicaments that are hurtful to the gastric mucosa, those namely that are mostly of the purgative kind. The gastralgic patients may have mucilaginous pottages, fresh eggs, gelatinous meats, and thickened barley gruels as drink. We must not forget that this evil is almost always a reflex or sympathetic. Thus it is that we must consequently closely observe and treat all ptoses, all hernias, hemorrhoids and uterine deviations. We have to counsel warm clothing, and females should replace their rigid corsets with girdle corsets of elastic tissue.

Gastralgia requires habitual general treatment of neuroarthritism, living in the open air, exemption from fatigue, especially of the mundane kind, exemption from intellectual work and overwork, giving up the use of tobacco and of aperients, and all drinks after meals. Presclerotic persons (inclined to sclerosis) and persons of an exaggerated disposition (préscléreux et les hypertendus) are subject to a variety of gastralgia which is accompanied by cardiac arrhythmia and at times by tachycardia. In these cases use should be made of the high-frequency current and the current and sparks applied at the epigastrium locally by the aid of Oudin's resonator.

Under a pretext of debility, and during an attack of sudden boulimic appetite, the gastralgic patient may be led to use and too often abuse strong wines, prepared meats, highly seasoned dishes and condiments. Then it does not take long for him to superadd to his purely nervous malady a dyspeptic gastropathia of a more or less grave character. The sedative granules of codeine, cocaine, cannabin and hyoscyamine, moderately employed, act very well against the false hunger and against the impulsion to use excitants. These granules are also valuable for dipsomaniacs.] If there is also an associated chloranemia we should add quinine hydroferrocyanide, which is perhaps the only iron preparation that is tolerated by gastralgic patients, but we must always begin with small doses. [We must warn against the use of cocaine internally. is a dangerous drug, lending itself too readily to habit formation.-ED.]

In young hysteric females gastralgia is altogether a special disease. It readily becomes complicated with a rebellious anorexia and an uncontrollable emesis. As soon as the diagnosis is made certain the physician should begin a course of therapeutic intimidation; he should speak loudly of direct cauterization, of electric shocks, of esophageal sounds and bougies, and even of surgical operations. If these

moral means fail then he should not hesitate to prescribe absolute isolation, permitting neither the receiving of letters nor visitors. This mental diet becomes indispensably necessary in order to make effective the useful suggestions and to reeducate the unsteady will. In recent times I have thus intervened in saving from death some young hysterical patients who, after adopting a diet of inanition, have brought on vomiting which eventuated in progressive cachexia. Such are those hysterical gastralgias which are engendered by those lean and long silhouettic females, by that absurd fashion which is reigning at the present time.

We ought not to believe that all vomiting of hysterical females is without any organic trouble. A certain number of these cases is connected with stomach lesions, especially when there is gastrorrhagia, even menstrual, for there can be no bleeding unless there be erosion, though there may be no ulcer. Usually it is pain felt on palpation of the epigastrium which betokens the development of the hematemesis in the paroxysms of the nervous patients. The pure nervous attacks are moreover recognizable by their sudden invasions succeeding some emotion and they are more frequent when the stomach is empty. They terminate with a convulsive attack, more or less characteristic, in which suffocation and repeated sighing and air-swallowing and abundance of tears are predominating features.-DR. E. MONIN in La Dosimetrie, June, 1911.

THE ALKALOIDS

The discovery of the alkaloids, said Dr. Debout, of the last century, was one of the most important ones made at the commencement of that century, and it saved the medicinal flora from the ship-wreck in which modern skepticism threatened to engulf it. The energetic action of most of these organic bases no longer made it possible to contest the properties of a goodly number of medicinal plants whose therapeautic value had been called in doubt.

Moreover the fixity of the composition of these new products entitled them to the same rank with the most active and constant principles in the mineral kingdom. It is enough to name in this respect quinine, digitalin, aconitine and hyoscyamine to make evident at once that the vegetable principles can furnish practical medicine with resources not less energetic than iron, mercury and arsenic.—Repertoir Universel de Médécine Dosimetrique, Vol. XII, p. 191, 1884.

[The Gleaner places this paragraph here, at this late date, merely as an item for the medical historian, who will find further valuable material in the article by Dr. Forran, from which this paragraph is taken.]

THE SPREAD OF CHOLERA

At a recent meeting of the French Academy of Medicine, M. Chantemesse reported, for himself and for M. Borel, concerning the part which emigration plays in cholera. In the year 1910 cholera passed from east to west, and the winter of that year extinguished its focuses in Russia, in East Prussia, in three Ottoman localities, in Hungary and in Italy. Have the local struggling efforts put forth in all these focal centers been sufficient to protect us? We do not dare to hope that they have.

The inquiry instituted by M. Chantemesse yields some facts which show the formidable part which latent microbism and emigration play in the transportation of cholera.

Chantemesse cites many instances, and concludes as follows: The preceding facts establish examples of latent microbism: Individuals have left cholera-infected centers after 25 or 30 days, all their baggage has been disinfected, and sometimes several times, they themselves have been visited two or three times by physicians, and they have presented definitely most serious guarantees, from the point of view of maritime sanitary police, such as are defined in the international texts, and yet the infection of these individuals nevertheless withstands time and is not at all destroyed by the disinfection to which they have been subjected; despite all the medical examinations, it shows itself after all the precautions which have been exercised.

What protection against danger have those five days of observation imposed by the last international sanitary conference upon persons who come from countries contaminated with cholera?

If it is desired to make war against the transport of cholera by attacking latent microbism we cannot obtain that result to a greater or lesser extent except by severe regulations and active surveillance over emigration.

The preceding international sanitary conferences directed all their efforts to the danger of Mussulman pilgrimages. The next conference should occupy itself with the new facts growing out of the everincreasing extent of emigration, for inquiries show that for the exporting and spread of cholera the pilgrimage of misery is as dangerous as the one of religion.—

Gazetle des Hopitaux, 1911, pp. 226-227.

[These facts are in accord with the discovery, in New York, of a number of "cholera-carriers"—individuals who harbor the germs of the disease in their bowels, thus disseminating the disease itself, though they are themselves entirely well. How many of these "carriers" come in as immigrants is a vital problem, which our sanitarians are now trying to solve.—ED.]

THE PROTECTIVE EFFECT OF THE AIR

Our earth is hit every day, according to average calculation, by about four hundred millions of meteoric stones. Those rattling missiles from the universe about us would have a terrible effect were it not for the protective action of the atmosphere. But the friction of the meteors when passing through the air that covers the earth puts the smallest of them into a glowing heat, which burns them up and scatters them as dust before they arrive at our earth. Only few meteors reach the earth and these with greatly checked speed. The rain drops and the hailstones would bombard us with the speed and weight of the discharges from a gun were it not for the protection of the air. The same moderating protective effect is experienced by us in the change of temperature from day to night.

On the moon, which has no atmosphere surrounding it, the temperature changes between day and night, i. e., between its radiation [How I wish I were allowed to write "beradiate," like the German bestrahlen!—GLEANER] by the sun in the daytime and the absence of radiation at night are, according to calculation, from 100° C. above the freezing point to 200° C. below zero (212° F. to 148° F.), while with us on earth the change amounts to only a few degrees. This moderation is effected by the atmosphere which protects the earth.—Der Geisteskampf der Gegenwart, July, 1911, p. 270.

TEMPERATURE DIFFERENCES IN THE AXILLAE OF THE TUBERCULOUS

Von Casali states, in Gazzeta Ospedale, (1910, 1041), that the temperature in the axilla on the affected side of tuberculous patients is almost constantly higher, the plus amounting to some tenths of a degree (centigrade) as compared with the healthy side. The difference is most pronounced in acute cases. Exceptionally an augmentation of temperature is met with in the axilla of the healthy side. The explanation of this latter phenomenon demands further study.—Wien. Med. Wochenschr., 1911.

SKIN DISEASES TREATED WITH ETH-EREAL EXTRACT OF MALE FERN

For many years Laner has been treating acute and chronic eczema, acne, sycosis and other skin diseases by brushing them over with ethereal extract of male fern exclusively. He has obtained some brilliant results with this remedy and in a short time. For acute cases the extract is mixed with two parts of ethereal tincture of valerian, and for subacute and chronic cases one or one and a half parts of the valerian is used. The remedy is applied at night and the affected place is washed and cleansed in the morning with soap and water and covered with a lead-glycerin ointment. In acute eczema, poultices are applied two or three days before the brushing with the male fern is begun. Crusts must always first be removed.-Pharmaz. Zentralhalle, 1911, p. 42.



Prof. Ellingwood Comments on Lobelia and Macrotys

HAVE taken great pleasure in reading your August issue; at the same time I observed some queries to

which I should like to reply.

Concerning the hypodermic treatment of asthma, your readers are probably not familiar with the fact that we are now investigating the hypodermic use of lobelia, a remedy which we find of immediate benefit in the treatment of every form of asthma, except that form alone which is dependent upon disorders of the heart. All other varieties are benefited by this treatment, and the one which is manifested by spasmodic paroxysms is relieved immediately. Fluid preparations of lobelia are nearly all irritating when used hypodermically. To meet the demand, Lloyd Brothers have prepared a hypodermic lobelia, free from alcohol, which produces no abscess and only a minimum of irritation.

In the perhaps 2000 cases in which lobelia has been so used, it has produced nausea in less than one percent of the cases, and when given in even as high as 2-dram doses, no toxic effects are observed. On the other hand, from 10 to 30 drops given hypodermically before or during a paroxysm will produce magical results in spasmodic asthma.

The remedy is in no way a depressant and can be given to the weakest person, while exerting a peculiar toning, upbuilding and a general restorative influence that is shown by no other stimulant. I say this advisedly. So administered for asthma, the remedy overcomes the immediate

distress, rapidly lengthens the period between the paroxysms, abridges the severity of the paroxysms, and in many cases, if continued for sufficiently long period, of one injection every one, two or three days, will result in a cure.

The same agent is directly adapted to the treatment of whooping-cough. Those who have used it, give from 5 to 10 drops hypodermically, just before a paroxysm, and succeed many times in aborting the paroxysms, and in producing, if given in the evening, a quiet, refreshing, prolonged sleep that prevents the return of the paroxysms during the night. It is my opinion that with children a small dose will be as efficacious as a large dose, and will be found very satisfactory when properly adjusted. I have but few reports on the action of lobelia in this disease, but all observers speak of it very hopefully.

Another excellent addition to the treatment of whooping-cough is the application of caraway oil, rubbed once or twice during twenty-four hours over the pit of the stomach. In this locality it gives better results than if applied to the chest. I have some excellent results from the use of this external application alone, in relieving the severity of the cough, especially when

begun early and persisted in.

In the treatment of chorea, I would advise the readers of this journal to prescribe macrotys [Here, and succeeding, Dr. Ellingwood refers to the eclectic "specific" fluid extract.—Ed.], in the proportion of 1 dram in 4 ounces of water, to a child of twelve years, giving a teaspoonful every

two hours. If there be nervous tension, especially with any tendency to cerebral engorgement, and contracted pupils, give 1-2 to 1 drop of gelsemium with each dose. If a constant nerve sedative seems to be required, give 4 or 5 drops of scutellaria with each dose. Every physician understands that rest, isolation, and full-nourishing, well-digested food are also required. With a proper attention to these conditions, the patient in nearly all the cases can be cured. This course, in the hands of my readers, has been very successful.

Dr. Gregory asks for experiences in the treatment of tetanus with gelsemium. I have a record of something like a score of cases in which that agent has been used successfully. There are two conditions that must always be borne in mind in the treatment of tetanus. The first is the neutralization or destruction of the free toxins in the system, and, second, the antagonizing of the condition of spasm, by a sufficiently powerful agent, which will also restore the efficiency and normal function of every organ at the same time, while in no way undermining the vital forces. This indication is fully met by the use of a powerful antiseptic and an equally active antispasmodic given together. For this purpose one of our physicians employed a mixture of 20 drops of 95-percent carbolic acid, 20 drops of specific gelsemium, and 20 drops of water, injected into the deep muscular structures every four or six hours. He treated twelve cases, eight of which were very severe, and cured every one.

Others have used echinacea internally and applied directly to the wound, after the wound has been freely opened, and have administered from 20 to 40 minims of gelsemium every three, four or six hours hypodermically, with equally good results. Others, again, in two or three cases only reported, have used lobelia alone with good results; but those who have used lobelia and gelsemium together have obtained better results than when using lobelia alone.

In 1884 I recommended to the faculty of the Chicago Veterinary College the use of gelsemium in tetanus in horses, because they were then having very many cases and losing more than 80 percent of them.

I recently received word from the secretary that since that time they have employed gelsemium and lobelia, reducing the mortality to 60 percent. I did not realize then that an antitoxic remedy was necessary to be used with the antispasmodic. This I now consider should always be remembered.

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[Most of our readers will remember the paper by Dr. E. Jentzsch on the hypodermic use of lobelia in diphtheria, which appeared in Clinical Medicine in April, 1909 (page 453). This, we believe, was the first time that it was proposed to administer the remedy in this way. Since then a lot of experimental work has been done and it has been shown that results can be obtained, when it is introduced into the body subcutaneously, that seem impossible when it is taken by the mouth.

Lobelia has been used hypodermatically for a variety of conditions with gratifying results, the principal objection, however, being the pain which it caused. This was sometimes intense. Lloyd's new preparation is undoubtedly excellent. A number of our subscribers have used the concentration, lobelin, hypodermatically with good results, and one of our friends has been experimenting for several months with the pure alkaloid, lobeline. The results obtained with the latter have been brilliant, and before long we hope to give them to our readers.

One of the striking things about the hypodermatic use of lobelia is the absence of nausea, to which Dr. Ellingwood calls attention. Moreover, as the doctor says, it does not seem to be depressant. Dr. Jentzsch called it a "vegetable antitoxin." This suggestion that it may prove curative in asthma is of intense interest and should be followed up and verified, if possible, by members of the "family."

We are sure that every reader of CLINICAL MEDICINE will appreciate Dr. Ellingwood's therapeutic suggestions, and ask him to give us more of them. He has given us some hints which we shall many of us try out,

though we probably shall take the license of the active-principle enthusiast and use lebeline, macrotin and gelseminine.—ED.]

FURTHER DISCUSSION ON DR. ROBIN-SON'S PAPERS

As we announced last month, we have received many letters of comment upon Dr. Robinson's remarkable paper, "The Limitation of Offspring." A number of these have already been printed, and several more we are reproducing in this issue. We regret that lack of space makes it impossible to publish more of the articles sent us, and that we are compelled to abbreviate some of those which we are printing.

The discussion follows:

THE MORAL ASPECT OF LIMITATION

Dr. Robinson's article (June and July issues) is certainly a very vigorous and forceful one, and appears to be written with sincerity by a man who evidently thinks himself qualified to speak with authority regarding all matters of human conduct, human responsibility and human welfare.

It is to be regretted that Dr. Robinson does not manifest a better spirit in the presentation of his Near the beginning, he speaks courteously paper. concerning a diversity of opinions that "cannot be helped," and suggests that "it is better so-provided discussion be honest and sincere and not unnecessarily acrimonious." But he violates his own injunction even before he pronounces it, and also here and there throughout his article, going out of his way to sneer at the views of a large number of people, in and out of the profession, regarding matters that do not have to do directly with the question under discussion. He refers to the "free-will fetish", the "childish belief in our descent from Adam," and gives an absurd definition of faith which he seems to endorse. A true scientific philanthropist, in discussing a great question in which all are interested, ought to proceed with manly courtesy.

Dr. Robinson presents some strong arguments in support of his views, but the same kind of arguments would apply with almost equal validity in favor of suicide under certain circumstances or to the destruction of idiot infants and the permanently and wretchedly insane. Perhaps Dr. Robinson would so apply them. He speaks of "my remedies for the uplift and regeneration of humanity," and the advocacy of murder and suicide may be among the number. This is the more probable from his laudatory reference to Ingersoll, whose teachings on the subject of suicide are well known.

With a naiveté that is somewhat amusing in so scholarly a man, Dr. Robinson says, "I have considered every possible objection—whether I have answered every point satisfactorily is a different question, but I have considered them all."

At the risk of being counted one of the "peculiar people" to whom he later refers, and therefore under his anathema, I would suggest an aspect of

the question which he has not discussed, and that is the moral aspect. It seems hardly possible that he considers it but a part of the "theological argument," which he mentions but to throw aside with utter contempt. Many who care little for theology have regard for moral standards, as established by the consensus of human opinion or otherwise, and think that the moral aspects of this question are the most important of all and entitled to the fullest consideration.

Though Dr. Robinson regards illicit sexual intercourse as a venial offense, he counts abortion to be a crime, chiefly, it would appear, because of the dangers to the life of the mother. Are the violations of the rights of the unborn child to be considered at all in this connection? If so, can it be said in every case just when conception takes place? May it not in some instances be coincident with coitus? Even if it is always some time later, is not the act of bringing together the elements of life such a direct invitation to a new life that all interference with such a prospective new life would constitute an immorality, if not a crime?

Without cavil, it may properly be said that the moral aspects of this question, if not the crux of the whole matter, at least deserve careful considera-tion from any honest and fair-minded man who presumes to take up its discussion.

A. M. STOCKING.

Good Hope, Ill.

FROM A WOMAN WITH SEVEN CHILDREN -A DOCTOR'S WIFE

I have read Dr. William J. Robinson's article on "The Limitation of Offspring" with much interest, and I admire him because he has a deep sympathy Yet I, the mother of seven for suffering women. children, disagree with him on some points.

I know what it is to suffer all of the things which he describes, and I feel grateful that one man understands what women have to go through-yet I feel that I have been fully paid for my suffering. Yet I know what it is to be scorned and taunted by neighbors, for more than two-thirds of the people with whom I am acquainted practise "limitation of offspring."

It is perhaps true that we cannot care for a large family as well as we can for a small one, but, nevertheless, I feel that the backbone of the nation is in these large families. Here they learn to make sacrifices one for another while they are young, and if we mothers lay the foundations well sure that our children will become well-educated men and women, even if our means are very limited. When there are only two children they both get the things they want, and they don't know what it is to sacrifice. If we cannot make sacrifices enough to bring up our families how can we expect the coming generation to be ready, if the need comes, to sacrifice themselves for our country or for one another?

Yes, child-bearing pulls down many a high-strung girl, but if she has real character she will come up again. If she is a brave, true woman she will not look upon her work as drudgery. I am not a strong woman, but with my children's help I do my own work, and sometimes the laundry work for the family, and I find time to read. I read much more than I did when I had only one or two children.

I. for one, know that my children have not been a curse to me, neither mentally nor physically.

I am thirty years old and look as well and feel as strong as I did ten years ago.

A MOTHER.

---, Kansas.

[We withhold this lady's name at her request.— ED.]

FROM ANOTHER DOCTOR'S WIFE

. I have read Dr. Robinson's "Limitation of Offspring" with great interest, and I am sorry to see from the comments that the majority don't agree with him. Dr. Robinson's remedy may or may not be right. I don't presume to say, but I know something is wrong. The maternal instinct is as strong with our women as it has ever been. We love our children. We want them, but we must remember that each generation of civilization and unnatural living breeds a more complex and highly strung race of women who are physically unable to bear the number of children that the primitive races do, and our women should be protected.

And speaking of educating the people. Can't something be done about the senseless little smattering of physiology that is taught our children in the schools? They are religiously shown a diagram of their digestive organs, their lungs and hearts, but what boy or girl ever saw a diagram of his or her generative organs? I know a girl who, until she was almost grown, thought she menstruated through her urethra. No wonder she had leucorrhea. She had never seen a fountain-syringe. Our girls are taught that it is an offense against society not to use the tooth-brush regularly, but how many are taught the importance of washing out the vagina?

A Doctor's Wife.

-, Kentucky.

THE LIMITATION OF OFFSPRING—A PROTEST FROM THE SOUTH

All men are influenced by their environment. Dr. Robinson is decidedly so. Men living in New York City seem to think that that city is the United States, and the remainder of the country a hazy fringe round about. Japan has a population of fifty millions of people, but the state of Mississippi, with an equal area, has two millions. Does Mississippi want limitation of offspring? Many western states have a still less dense population. Do they want their population arrested?

Six weeks ago, Waco, Texas, received a carload of babies from New York. When the train reached Houston, Texas, the women of that city tried to mob the train in order to get the babies. In a few weeks more they received a carload for themselves. Does Texas want limitation of offspring?

Our political economists tell us that the United States can support a population of six hundred millions of people. With Alaska and Canada, one billion people could live in peace and plenty north of the Rio Grande. Does this vast country want limitation of offspring? No, a thousand times, no!

Last winter every night at one o'clock two thousand men formed a bread-line at the Bowery Mission in New York to get a cup of coffee and a piece of bread. (God pity their poor women!) At the same time the South and the Southwest were begging for labor and offering inducements to immigrants. Those men could be happy with their wives and children in the South. Must this entire vast country

country suffer for the conditions prevailing in a few congested areas?

few congested area

Dr. Robinson says that the limitation of offspring by a knowledge of how to prevent conception would not increase illegal cohabitation. No man was ever more mistaken. We in the South believe that we have the most virtuous women on the continent. They have an inborn modesty, a shrinking from vulgarity, a sweetness of character that is proverbial. But let me tell you, brother, that, if our women, as well as those of other parts of the country, had a knowledge of some easy and positive way of preventing conception, in a few generations chastity would be as rare as it is now common.

A girl is as conscious of her sex as a boy of his, and when enthused by a God-given passion, and under the gentle persuasion of someone whom she thinks she loves, if all restraint were removed, this girl would resist no more than do our boys today when they are subjected to a similar temptation. No, Dr. Robinson is unmindful of the fact that our young women are suppressing a volcano of animal passion; that we are but little above the brute creation in such things. The only restraints I know of are the religion of Jesus Christ and the fear of conception.

We of the stronger sex should throw all safeguards possible around our women, guard, guide and direct them, going on as we are now trying to go,

to a higher and better life.

C. S. H.

---, Mississippi.

LIMIT REPRODUCTION OF THE UNFIT— BUT NOT OF THE FIT

Dr. Robinson's article in limiting offspring will doubtless receive criticism from abler pens than mine, but in response to your invitation I will

submit my views.

Passing over the slurs upon ideas held sacred, I am sure, by a majority of your careful readers, I will speak only of the subject-matter of his paper. I must dissent from the proposition that large families are necessarily the result of excessive child-bearing. All pregnancies of the unfit are excessive, whether the parents be poor or rich. Cases have occurred in my practice where I felt it my duty to caution against what I considered excessive child-bearing, not because the parents were poor, but because of unfitness.

I cannot agree with the doctor that the large family of the poor is "one of the greatest causes of low wages, poverty, ignorance, idleness, sickness, crime, and death." So sweeping a statement needs proof, to say the least. Neither can I admit that the first two or three children of normal parents are dearer than those that follow. I am number eleven in my father's family, yet I never had reason to believe that I was unwelcome, albeit my father was far from being rich.

In my forty odd years of practice, more prospective mothers of the well-to-do and the socalled rich have appealed to me for fetus murdering than of the socalled poor, and in the majority of cases the plea was made in the first and s:cond pregnancies.

In my first school on the Iowa frontier (before taking up medicine), over fifty years ago, I had pupils from three families of twelve and thirteen children each. These people were not rich, by any means, and all lived in houses of four rooms or less.

that honored Secretary of Agriculture was the oldest and in one of these families, and not one of the thirty-seven children of these three families was ever found among the ignorant, idle or criminal.

I firmly believe that the one-child proposition is a great mistake. Everybody knows that such a child is more likely to be selfish and uncontrolled then where association with brothers and sisters has begotten forbearance and mutual helpfulness. Show me one large family where the parents, poor though they be, consider their children a misfortune, and against it I will show you six childless couples deploring the fact that in early married life conception was prevented.
You ask, Mr. Editor, whether the Doctor has

found the solution of a great social problem. For myself, I must say, emphatically, NO!

For every crime the direct result of excessive childbearing, you will find a score and more the direct result of intemperance. Take away the saloon with the shiftlessness, idleness, crime, and poverty engendered by it, and you will not need to teach the public how to prevent conception. teach the public how to prevent conception.

Teach our young people the value of economy, of chastity and purity of character, and there will be little need of instruction about curtailing their progeny. There need be little fear that the children of coll metal the children in the children of coll metal the children in the childr of well-mated, temperate, healthy parents will ever become a menace to society because of their number. Let honor, not pity, nor blame, be given to the mother who gives to the world the normal half-dozen or yet more children, and does her best to make them worthy citizens, even though she may be handicapped by what the world calls poverty. By and by those same children will rise up to call her blessed.

C. W. COOPER.

Campbell, Calif.



MRS. T. A. STEVENS, CANEY, KANSAS Mother of seven children, five daughters and two sons; 50 years old and not one gray hair

WRONG AND DANGEROUS

My observation and personal experience, after thirty years devoted to the practice of medicine, tells me that Dr. Robinson's thinking and teaching are not only wrong but so dangerous that there are no English words capable of expressing it.



THE FIVE DAUGHTERS OF DR. T. A. STEVENS, CANEY, KANSAS

All of them graduated from the Cancy High School, some of them graduated from higher schools; four of them happily married and prosperous. They can all play the piano; cook, and milk a cow; drive an automobile and set a hen. The picture being old, the millinery is of the "brand of 1908." The ladies apologize!

To show you that I have "practised what I preach," I am enclosing the picture of my wife and her five daughters. We have seven children, five daughters and two sons. The older son, thirty years old, is a prosperous and capable business man; the younger son, fourteen years old, is a fine, healthy boy in high school. All of the five girls are high school graduates. Each can play the piano, cook, milk a cow, drive an automobile and set a hen. Four of them are happily married and prosperous. The wife and mother is fifty years old, in good health and happy—with not a white hair!

All of our children, married and single, live in Caney. John D. Rockefeller and Andrew Carnegie cannot enjoy their millions more than we do our

seven children.

THOS. A. STEVENS.

Caney, Kan.

ROBINSON IS RIGHT

George Bancroft, the historian, said Wendel Phillips was "right, but fifty years ahead of his time." This is just what I thought of Dr. Robinson, after reading his address on "The Limitation of Offspring" printed in the June and July numbers of The American Journal of Clinical Medicine. It is a most masterly and truthful presentation of a most important subject, and must appeal with tremendous force to every sympathetic doctor. But to preach such doctrine now to the great mass of mankind would be like casting pearls before swine. I have tried it for over forty years and know whereof I speak.

The world never accomplishes but one great reform at a time, and the economic movement is the one now most pressing for consideration in all socalled civilized nations. Our cannibalistic, capitalistic, anarchy-feeding system must give way to the more sane and sensible cooperative commonwealth, in which all will have a chance to work and to get the full product of their labor (instead of one-fifth as it is now), before the masses will have the time and incentive to study this question.

With the incoming of socialism, to which Dr.

With the incoming of socialism, to which Dr. Robinson evidently adheres, the superstitious part of religion, i. e., much of creedism and churchiety, will give place to the more dynamic principle of meliorism. With religion based on the great doctrine of the brotherhood of man and the fatherhood of God, and economics based on the impregnable science of biology, as taught in evolution, the science of eugenics will be studied in our schools. Then will heaven really begin on earth, and in the family relation, primarily, life will be worth living.

S. J. Browning.

Fort Worth, Tex.

THE DANGER OF PROMISCUITY

Continence in adolescence is essential to racial vigor. We are decrying early mating among ourselves, and legislating for other races. The family is the basis of higher civilization; promiscuity is not desirable. The most advanced races are the tangible proof of these dicta. By much travail and experimentation we have arrived at a fairly true monogamy and sex continence, with late mating.

Whatever be claimed to the contrary, a general knowledge of limitation of offspring will surely lead to early excesses, promiscuity, and destruction of family life, with its development of the

community instinct. Woman, who, as child-bearer, has benefited most by monogamy, will be the loser (already is) from loosening of the family ties. The only argument in favor of "limitation" knowledge is, that it may lessen abortion and infanticide. As to some of the evils to be "cured", a far better and more effective way is sterilizing potential fathers and mothers when indicated.

A. VOGELER.

Chicago, Ill.

ENDORSES DR. ROBINSON'S CON-CLUSIONS

I appreciate fully that I am a very small toad in a very large puddle, but I am consoled by the fact that I have company and that very few are large enough to make so large a splash on so important a subject as Dr. Robinson.

While not fully accepting all of his reasoning, I endorse his ultimate conclusions. The subject is vital. I meet it every day, you meet it every day, and every other practitioner of medicine meets it every day. Then it must be up to us to solve it, and we alone can solve it and solve it correctly.

The comments in the August number of CLINICAL MEDICINE on Dr. Robinson's paper are red hot with criticism and endorsement. To those who stand aghast with the thought that the pages of the journal should be polluted by the ungloved handling of such a subject I wish to state a universally accepted fact, and ask a question. A normal married woman living with a normal husband will conceive and give birth to a child at least every two years, if no steps are taken to prevent conception. Now, then, my dear brothers, how many of the families in your acquaintance keep up this standard. Have you, my brother, lived up to it? I know your answer will be negative. Then why condemn and preach against your own practice? Get in line, my brother; this question is going on to solution whether you go with it or not.

We may not know where we are going, but we are on the way.

E. H.

---, Iowa.

OVERPRODUCTION IN A SOUTHERN MILL TOWN

Yes, sir, keep my journal coming. I read it from cover to cover and get more genuine good out of it than from any magazine I take. The *Critic and Guide* is next, as I agree with Dr. Robinson in his fight for "limited reproduction."

Son in his fight for "limited reproduction."

A word! I have been practising medicine for twenty-five years. My work is general, but naturally I have a large obstetric practice. I go into the homes of all kinds of people, high and low, rich and poor, doing work at four cotton mills and some other manufacturing plants, seeing life coming and going, and on all sides, and as a result I believe that educating the poor people along this line would be a great blessing.

I am no abortionist. Far from it. I note that some of the articles in the last number are treating the subject from that viewpoint. This is not treating Dr. Robinson's contention fairly. He does not argue to stop that which is already started, but to avoid starting.

I see the deplorable effects of those large families every day among the very poor, counting my obstetric cases over one thousand. At the cotton mills I see couples who married young, with from eight to ten half-clothed, poorly fed, dirty children, depending on the underpaid father's wages, with a little help from possibly one or two of the older children who have arrived at an age when they can work some. The poor mother (from having married so young) is liable to be the mother of three or four more unwelcome children before her sexual life ends. From the present tendency this condition will grow worse because so many of those poor people (children you may say) marry in their teens..

All married people want children. If anything

All married people want children. If anything is deplorable to me and a cause for sympathy, it is the married couple who for four six, or eight years have been looking for and patiently expecting the coming into their pleasant home of a little one, while their neighbors on all sides are happy recipi-

ents of numbers of them.

Here are the two extremes: The family with no children, and the one with ten or twelve. An old adage presents itself to my mind: "Enough is enough even if it is of the very best." Who will not admit that the "happy medium" of only four of five children would not be the best, and that these would stand a better chance to get an education and to fight with an equal chance the battles of life?

I think the greater sin presents itself at the other end of this overproductive condition, for we see large families of those poor people ruthlessly and heedlessly ushering into this world children whom they well know they cannot properly raise, clothe and educate. What is this but wilfully making mental dwarfs, inebriates and criminals? What a responsibility falls on us parents.

G. E. FLOWERS. Granite Falls, N. C.

THE DUTY OF RACE IMPROVEMENT

In looking over the articles under the caption of the "Limitation of Offspring—a Discussion," I have been very much disappointed to find so little that can truly be termed a discussion of Dr. Robinson's fine paper. His ideas have been termed a "dangerous doctrine." Why? Are we as physicians not the conservators of human life and happiness? Is it not our province to do and to say that which will the most perfectly protect human interests, physical and moral?

All things change, and these changes are, to a certain degree, the products of the human mind, working together with the fixed laws of God. He made the world and pronounced it good, but sin came in and played havoc with it, and the result is that unless some agency stands guard over

things, they go to the bad.

Take the vegetable world, and here we find tares and weeds. If these are not eradicated or kept in abeyance they will destroy the more valuable life.

In the animal kingdom we find that, unless they are destroyed, the more pernicious will multiply, and destroy the individuals of a more useful character. What is the remedy? The law of control—the elimination of the offensive or harmful, and the cherishing and protecting of the lives which are most useful, perfect and desirable. This is, indeed, man's mission on earth.

The horticulturalist is constantly adding to the comfort and welfare of the community by a better knowledge of the laws of reproduction. The stockman is continually studying the best means for the production of more perfect animals. Yet

humanity is allowed to go on haphazard, in the same old way, with only a meager attempt at betterment, hiding behind excuses instead of delving into the unsavory truths which are choking the moral lives out of us, and increasing the tares of selfishness, hatred and lust in our midst.

We must have a greater regard for quality as

We must have a greater regard for quality as against quantity, a more perfect parent to produce a more perfect child. How can we do this if we fail to do that which is right, and allow wrong to dominate? We and our neighbors must suffer the consequences.

-, Missouri.

On another page of this number we print an article on "Abortion" by Dr. Robinson, which takes up the relation between limitation of offspring and the problem of abortion. It carries the discussion a step farther, and the short articles which precede are all pertinent.

When we printed the paper by Dr. Christian Johnson in the April, 1910, number of CLINICAL MEDICINE, and that by Dr. J. Augustin Flynn, in the same issue, we thought we had closed the discussion of the abortion question, so far as these pages are concerned. But the subject is one in which the profession is interested, and from time to time it is sure to come again into the foreground. It is our policy to give every man who thinks strongly, and expresses himself with force and conviction upon any subject which vitally concerns our profession, a chance to be heard. It is for this reason that we have opened our pages to the papers of Dr. W. J. Robinson. Let it not be assumed, because we have printed these papers, that we are in agreement with the author, that we indorse his ideas, accept his conclusions or would urge the acceptance of his proposed reforms. We do not; indeed, we disagree with him radically on many points. This we do believe, however, that progress can only come through open, frank and absolutely free discussion.

Dr. Robinson's papers are the product of the earnest and conscientious convictions of an intense mind. He believes with every atom of his strong personality that the remedy he offers carries with it the possibility of simply inestimable good for mankind and womankind.

There are many who will believe (as, frankly, the writer does) that Dr. Robin-

son's remedy will fail, because it does not take into account the economic conditions which lie at the bottom, and that it is dangerous, since the widespread dissemination of information of the character advised may lead to promiscuous sex relations, both inside and outside of the marital state, among women as well as among men.

After all, what is the imperative need for interference, on our part, with the course of nature? From all over the civilized world come reports of shrinking birth-rates. France now hardly holds its own in population; the German birth-rate has fallen for the last three decades; the same is true in England; while in America our old New England families, of the pure Puritan stock, are slowly but certainly disappearing. The means of preventing conception are known well enough-too well by the many in well-to-do circumstances, whose desire to escape parenthood is prompted by selfish motives, which find their basis in artificial and essentially debasing social standards. And the poor are poor, not because of their children, but because of an economic problem which is right now pressing society for solution. They are not begging for this knowledge; indeed, the average European immigrant looks upon children as the greatest blessing; from them, when the evil days and old age come, they look for love and support.

This is as the writer sees it. He may be wrong—he often is—and if he is wrong he is willing to be set right. It is for this reason that he is glad to study the opinions of others, on both sides. Let us all do this, without bitterness, without questioning one another's motives, or belittling the abilities of those with whom we disagree.

No, I cannot agree with Dr. Robinson, but I am glad, as doubtless most of the readers of this journal are glad, to know his opinions, to weigh his arguments.

THE PAPAYA AND ITS CONGENERS

In one of your issues, March, I think, my good friend Dr. Perry of Minnesota has a most interesting article on "Surging Through Africa," in which he says:

"This experience brought to my notice several of the native remedies, among which was the papaw poultice for chronic ulcers. This use of the papaw fruit (papaya) was reported to me in European and American medical journals, and later, when the inspissated juice of the papaw was exploited commercially as papoid, caroid, papain, etc., my little surgical contribution to its surgical uses was not overlooked by the boosters."

The carica papaya belongs to the order Papayaceæ [This term has been abandoned, the genera included under it having been more recently transferred by botanists to the natural order, Passifloraceæ.-ED.] which includes two genera, both native to tropical America. It is quite distinct from the paw-paw or less properly papaw—of the United States (asimina triloba, order Anonaceæ), a tree found in regions along the Ohio River and the southern and western states. The papaya (pronounced pa-pa-yaa as in papa, accent on second syllable) is a native of Brazil, and may now be found in all tropical countries, including Hawaii. It is sometimes called "melon-tree." Its flowers are generally diecious but sometimes The flowers are unihermaphrodite. sexual. In planting seed, one must take the usual chances of the human family as to sex. A few "male" freaks bear fruit, a longer fruit, with pendant swinging stemsbut the quality is good. [One of the Editors, during a sojourn on the Isle of Pines, Cuba, was shown several male trees that he was assured by good Americans had been converted, under their supervision, by natives, into regular bearers. The "trick" he was told by his friends (also by natives) consists, either in piercing the trunk of the young tree, at right angles, with a long, broad blade, or else to sever completely the tap root, with a machete, about 15 or 18 inches below the surfaces. If true—as it seems-no explanation can be found, except that nutrition is in some way affected. -ED.] There are some twenty species, differing slightly in flower and fruit, but exhibiting common characteristics.

The papaya tree grows to be about twenty feet in height, sometimes five feet higher, and, in Japanese gardens, is often dwarfed, so the fruit may be more easily reached. The fruit, some ten inches long, in size and shape like a melon, and generally corrugated at the stem end is, when ripe, of a yellow color. It is very wholesome, palatable, and easily digested, being eaten raw, either plain or with pepper and salt, as musk-melons are, or boiled, baked, and fried, particularly in the unripe state. It is also made into pies and custards—the pies much resembling our own pumpkin pies—and covered over with slices of Chinese oranges, or the juice of a lemon is squeezed over them.

The papaw seeds are anthelmintic, but in Hawaii are not used as a vermifuge, although they are fed to chickens to keep them in "good condition." Hogs fatten quickly on papayas, and large groves of these trees are kept for that purpose. As they bear all the year around and fall when ripe, all the farmer has to do is to put his seeds in, wait a few months, till the trees are grown up, then turn his hogs into the grove and let them get fat. Horses, cattle, dogs, cats, and chickens are very fond of the fruit. So are the mynah birds lovers of this useful fruit, and many a papaya is destroyed by these imported scavengers.

The milky juice of the fruit contains a digestive enzyme (usually found only in animal tissues), this principle constituting the well-known vegetable digestant known in commerce by various names, many copyrighted, such as papoid, caroid, papain, papayotin. The value of such a preparation may be tested by anyone. The pure milky juice, it is said, will even dissolve diphtheritic membrane. Aside from macerating between the leaves tough meat (and some of our Hawaiian beef is very tough), to make it tender, I do not know that the digestive action of the papaya is otherwise made use of in Hawaii.

The tree grows quickly, shooting up like Jonah's gourd in a night. As it grows, the leaves fall off, excepting at the top, leaving scars all around the trunk. Generally the body is free from branches, like a palm, but occasionally there may be seen a tree with odd, twisted limbs as distorted as any cripple. The trunk is usually straight when young, with a fine bunch of handsome leaves at the top; but as the tree ages, there

is a tendency for the trunk to come to a point, which after five or six years ends the usefulness of the tree.

To look at the trunk you would say that it was solid wood, but such is not the case, for it is soft and pulpy all the way through, and with two good strokes of the ax you can fell the largest tree. Underneath each leaf, attached close to the trunk, hangs the fruit in great abundance, but often so high up that you cannot reach it. Climbing the tree is out of the question, and placing a ladder against the brittle trunk is risky, for not infrequently these snap under the strain of heavy fruit or of ladders placed against them.

The fruit is very soft and tender, and if you shake one of the "squashes" down you may be obliged to take it up with a spoon. A resident of the district here puts up a sort of papaya jam that is very palatable and is sold to some extent. For some time a man in Honolulu manufactured a mixture of poi (taro, arum esculentum) and papaya, which was largely advertised in the States, but it did not sell to any extent. Perhaps the most palatable cooked preparation, suitable for exporting, is the papaya puff, a delicious biscuit, or cracker, but these have a local reputation only.

The papaw, belonging to the nearly related order of Passifloraceæ, is quite a distinct tree, being small, with obovate-lanceolate leaves, and characteristic blossoms. The fruit is about three inches long, having pulpy seeds like the rest of the species.

The purple-fruited water-lemon (passiflora edulis), which grows wild in Hawaii and is highly esteemed as a luscious fruit, is a member of this family. Also the grenadilla (passiflora quadrangularis), and yellow-fruited water-lemon (passiflora laurigloria). The latter are edible, and grow freely in this latitude. Five or six other varieties are cultivated for their blossoms, among these the well-known passion-flower vines so common in tropical countries.

The best classification of our flora I have seen is that by Dr. Hillebrandt, a botanist and physician who lived for many years in Hawaii and whose work, "The Hawaiian Flora," is a classic. The work describes

844 species of flowering plants and 155 cryptogams; comprising a total of 1000 species and 400 genera. These, to a surprising degree, are peculiar to the locality. The different conditions of climate and altitude here tend to differentiate plantlife, and render it more complex, changing race habits, and sooner or later, physical features.

E. S. GOODHUE.

The Doctorage, Kailua, Hawaii.

The papaw has special interest to the physician because of the presence in its juice (to the extent of about one percent) of an active principle, papayotin. This is an extremely active digestive ferment, resembling pepsin in its power to convert proteids into peptones, but differing from the latter and superior to it in this respect that its digestive action takes place both in an alkaline and acid medium and is not arrested by the presence of antiseptic substances, such as boric acid, phenol, and the like. According to Tavera, "it should be given after meals, carefully and properly diluted, in order that its action may not be exerted upon the gastric mucous membrane itself. Its use is contraindicated in gastric ulcer."

Readers of CLINICAL MEDICINE are generally familiar with papayotin, but we doubt if many use it extensively-as much as they really should, considering the wide range of digestive troubles in which it is really one of the best remedies at our disposal.—ED.]

MEASLES COMPLICATED BY PNEUMONIA AND FOLLOWED BY TYPHOID FEVER

I was recently called to see a man, aged 29, who had double pneumonia as a complication of measles. Before resolution had completed, he showed unmistakable signs of typhoid fever, having previously had nosebleed. The abdominal rash became plainly visible, and diarrhea was severe, with the passages foul and frequent. The temperature ran up to as high as 104.4° F., and within a short time delirium was active, the patient attempting to jump out of the window.

Here certainly was "a condition, not a theory," and to "get busy" was imperative. Ice-caps were kept on the head continuously; he was sponged every two hours with 2 quarts of hot water containing 1 ounce of vinegar. He was kept covered with only a sheet.

Calomel in divided doses, followed by a laxative saline were administered. Then 2 intestinal-antispetic tablets were given every two hours with 5 drops of "echitone." The last two remedies were continued in these doses until the temperature and pulse came down to a reasonable point, when the former was given one tablet every two hours, the echitone being continued in the original dosage. For defervescence I gave veratrine, straight, one granule hourly for a day, then less frequently. Nuclein in 2-drop tablets was given until the temperature became normal, when the triple arsenates with nuclein were substituted, one dose every two hours.

Throughout the duration of the case I gave an abundance of cold water that had previously been boiled; also buttermilk of excellent quality, all he would take, every two hours. This I continued until convalescence was established, when he was taking 2 quarts of buttermilk within twenty-four hours. I then gradually added junket, custard, and animal broths, and allowed him to chew beefsteak, without swallowing it. Bread and milk followed

when the tongue became clean.

The use of sweet milk during any acute abdominal condition does not appeal to me because of the effect of the indigestible caseins, this having a tendency to produce just the condition I am endeavoring to combat. It is liable to produce indigestion, followed by fermentation, then tympanites and intestinal hemorrhage.

The patient's mouth was kept clean by means of a warm solution of boric acid.

He made a complete and uninterrupted recovery.

The points I wish to emphasize are: (1) The necessity of "cleaning out, cleaning up, and keeping clean" the gastrointestinal canal. (2) Combating the blood dyscrasia. (3) The effect of nuclein, which certainly is an efficient remedy. (4) The

solety in the use of veratrine "to effect." (5) The unique reconstructive action of triple arsenates with nuclein.

I never before had such a complete and rapid recovery from such a condition. I should mention that tympanites was a distressing symptom for a couple of days, when it gradually disappeared.

HORACE R. POWELL.

Poughkeepsie, N. Y.

DEATH FOLLOWING THE USE OF SALVARSAN

I want to ask your opinion concerning a case of syphilis treated with salvarsan. Some months ago I gave a man of 27, suffering from syphilis of two-years' standing, 3.5 Gms. of salvarsan, in the vein of the arm. This was injected at 3 p. m. At 4:30 he began to have involuntary movements of the bowels. At 5:30 and after he vomited three times; was very nervous, but at 10:30 went to sleep, this lasting two hours.

The next day he vomited thirteen times; the kidneys acted twice and the bowels four times. No urine was passed after noon, so I catheterized him at 8 p. m.; no urine in the bladder. I gave him large doses of saline laxative and placed hot-water-bottles about him in the bed. Throughout the day I gave him digitalis, nitroglycerin and strychnine, hypodermically, also brandy by the mouth.

As he complained of nervousness and wanted to sleep I gave him one tablet of hyoscine, morphine and cactin; no effect, so at 11:20 p. m. I gave him half a tablet of H-M-C, pulse being 124. No vomiting or diarrhea. The patient slept a little and gradually stopped breathing, death occurring at 12:30, without recovery of consciousness.

What do you think was the cause of death? Did the hyoscine, morphine, cactin tablet have any influence in bringing on the fatal result?

"SUBSCRIBER."

For reasons which are quite apparent we withhold the name of the writer of this

report. First, we would suggest that the statement of the quantity of salvarsan ("606") used in this case is probably a mistake in writing. If it is not, then there is no wonder death occurred. The dose usually given varies from 0.2 to 0.6 Gm. Probably the doctor gave 0.35 Gm. (3.5 cg.) The symptoms are those of arsenical poisoning. The rapid appearance of diarrhea and vomiting, with dimunition and later suppression of urine, followed by quick and feeble pulse, all point inevitably to this conclusion. Salvarsan is an arsenical preparation, and even though the toxic arsenical symptoms do not generally occur, their possibility can not be excluded. Cushny says that in acute arsenical poisoning death may occur within twenty-four hours, but not infrequently the patient lives from two to four days.

Did the hyoscine-morphine preparation have anything to do with the death? Possibly, though we think not. Personally, we should have hesitated to give the second dose, considering the patient's critical condition, but it seems highly probable to the writer that the patient was already in articulo mortis when he received the second injection.

This case again emphasizes the advice we have given before: Leave salvarsan to the specialists. Experience has demonstrated that it is not free from danger, so that anyone who uses it should be thoroughly familiar with its action and a master of the technic of its administration. The idea that "606" cures at a single dose has been given up. Recurrences of syphilitic symptoms have occurred in a fair number of cases in which it has been used, and as Finger points out, it will take ten years to determine the effect of any new drug in this disease.

"I think," says Dr. C. F. Marshall of London, in *The New York Medical Journal*, "it is clear from these considerations that the original claims for salvarsan have not been substantiated, that there is no evidence to show that it cures syphilis, and that it cannot replace mercury in the treatment of this disease. Salvarsan may cure the symptoms temporarily in certain cases, but it does not cure the disease."

The general practitioner may well go slow with this remedy, relegating the pioneer work with it to men who have facilities for its special study.—ED.]

THE CLINIC PUBLISHING COMPANY NOW THE ABBOTT PRESS

The name of The Clinic Publishing Company was changed in July to The Abbott Press, by which it will hereafter be known. This change was made because of the incongruity of the old name, which was adopted when The Alkaloidal Clinic was the sole product of this establishment. Within recent years it has grown into a great printing and publishing plant, producing a number of books and magazines, and doing a large quantity of outside printing.

Hereafter, if you desire to communicate with the printing establishment which produces The American Journal of Clinical Medicine, address your communications to The Abbott Press, Ravenswood Station, Chicago.

COMMENT ON DR. EGBERT'S PAPER, "FADS AND FOLLIES"

I have read the lecture on "Fads and Follies" with much interest, as it is a subject to which I have given much thought, and I thoroughly agree with Dr. Egbert in his plea for publicity, not only on medical matters, but pharmaceutical as well.

We can expect nothing from the newspaper press as long as they are drawing such large revenues from patent-medicine ads, or from legislatures as long as bribable or ignorant men are elected. But if onetenth, and I do not know but I should be safe in saying one hundredth, of the amount spent in foisting nostrums, curealls, and infallible remedies for socalled incurable diseases, and the exploitation of the different crude, unscientific, purelyfor-money-making "systems" which seem to be springing up like mushrooms in this "free" country, were spent in disseminating truth and facts, it would not be long before public sentiment would be so aroused that medical practice and the use of drugs would be so guarded and restricted that the lives and health of the citizens of this land would be safeguarded to an extent little dreamed of now by the public generally.

But it requires a campaign of publicity; and though the enemy is strongly intrenched, both financially and by long custom, yet the medical and pharmaceutical professions have in their hands the weapons by which they can be utterly routed, if they will only use them. There is not the slightest objection to a qualified physician practising homeopathy, osteopathy, Christian science, urinopathy, or any of the other socalled systems, or to the druggist putting up proprietary remedies; but if neither are admitted to practise until they are qualified and the proper restrictions are placed on individual greed, quackery and the secret-medicine business will soon disappear.

It seems to me that true physicians and pharmacists will have to unite to rescue themselves from conditions which have become well-nigh intolerable to both, and from which the state loses largely both in number of citizens and their efficiency, which also means large financial loss.

But our sovereigns must be educated. Public opinion can be depended upon to do the right thing when the public once understands; and as we do not govern by the oneman power, the masses must be enlightened. Why not enlist such an agency as *The Saturday Evening Post?* That journal seems to have the idea that doing the right thing is best financially, and with a few independents like that on our side, we should soon win.

EDWARD F. BAKER.

Newark, N. J.

BRYONIA IN PLEURISY AND IN INFLAM-MATION OF MUCOUS AND SEROUS MEMBRANES

Have any of the readers of CLINICAL MEDICINE ever had personally or heard of a case of pleurisy, skilfully treated with bryonia or bryonin, where any serious effusion occurred? Those of us who have always been giving bryonia for pleurisy

are so used to having the attack subside so promptly under our treatment that we are not apt to remember that hydrothorax and pyothorax are very common conditions as is the case when less efficient remedies are employed.

Bryonia is such a powerful remedy to abort inflammations of serous and mucous membranes that every doctor ought to know its action. The patients all make perfect recoveries.

WM. M. GREGORY.

Berea, O.

AT BAY

"I've given him pills," said old Doc Squills,
"And he's taken a gross, I guess;
And jalap, and rhubarb, and ipecac—
But it's puzzlin', I confess.
I've given him wine and syrup of pine
And iron and calomel;
And he takes it mild as a little child;
But he don't seem to get well!

"I blistered his back at the first attack
And I greased his chest with lard;
And I looked at his tongue and sounded his lung
When I found him breathin' hard.
If I've written him one he's had a ton
Of prescriptions, I think.
He's had everything of a drug, by jing!
That a mortal can eat or drink.

"I've given him more than an even score
Of things for his appetite,
And some of 'em may be wrong; but, say!
Some one of 'em must be right!
Why, a fellow ought, with the stuff he's got,
Be able to eat a horse;
But his stomach's weak and his manner's meek,
And drugs don't have no force.

"I've given him a dose that'll fetch nigh close
Most any known disease;
It'll knock, by jing! most anything
From a bilious spell to fleas;
For it may be his stomach, and maybe not,
And it may be his spleen or gall;
So I just wrote in some medicine

"He's had morphine when his pain was keen And plenty of aconite; And digitalis whenever 'twas seen That his heart wasn't workin' right. He's had his skin full of medicine Sence at least six weeks ago,

That'd ought to hit 'em all!

Swallered and hypo'd and some rubbed in; But he gets well awful slow!

"So I'm just about clean plumb run out Of drugs and of ideas, too; And everything's been done, by jing! That a mortal man can do. And I can not tell if he's goin' to get well,
If he's goin' to live or die;
But when it's done I don't want none
To say Doc Squills didn't try!"
I. W. FOLEY.

The preceding is copied from *The Saturday Evening Post*. Our poetical editor ventures the following comment:

So he took him to see the laboratoree
Of a scientific Doc,
Who found the man full of indican
With skatol, an extra stock.
He filled up the coil with kerosene oil,
And the stomach he lined with saline,
Till he emptied the gut without making a cut,
And the patient then said he felt fine.

Then he peeked all about, looking in and out Till he found out who was the girl Whose erratic doings and worriting wooings Had put the man's heart in a whirl To save his poor life, she became his wife— As girls do now and then— He could then get away with three meals a day, And sometimes nine or ten.

THE MULTIPLICATION OF FLIES

It may be of interest to consider some statistics, showing to what enormous numbers the descendants of one fly may reach in the course of a summer. As most of you are aware, the eggs of a house fly hatch in from approximately six to twelve hours, and the maggots issuing therefrom reach their full size in from four to seven days. The outer layers of their body then harden and turn brown, forming the puparium, while the parts within become what is known as the pupa.

The duration of the pupal stage is from five to seven days, at the expiration of which time the adult emerges as a perfect fly. The life of the house fly then occupies from ten to twelve days, and there may be from ten to thirteen generations in a summer, depending upon the character of the season and on the latitude.

Of the length of life of the adult we cannot speak with certainty, for the only way this could be determined is by confining the insects, and when this is done, conditions of existence are so unnatural that observations upon this point are not reliable.

A female house fly which has hibernated in a dwelling house, or elsewhere, may produce in the spring, at the lowest estimate, one hundred and twenty eggs. Assuming that one-half of these hatch as females, and allowing that the breeding goes on without check for four months, we have as the descendants of a single hibernating individual 214,557,844,320,000,000,000,000 flies.

Now, a house fly measures exactly one-fourth of an inch in length; the distance around the earth at the equator is said to be 24,800 miles. It would take, therefore, 3,688,312,000 flies placed end to end to go around the world once. Using this number as a denominator, and the number of flies produced in four months from one mother as a numerator, we find that she will give rise, in the course of a summer, to enough flies to encircle the globe at the equator five thousand times, and have plenty of progeny to spare!—Prof. F. L. Washburn, St. Anthony Park, Minn., in the August number of *Popular Science Monthly*.

After reading the above, and pondering a while on all the crimes of that notorious malefactor, musca domestica, perhaps it is well to get an antivivisectionist view of this much swatted insect, as seen by Walt Mason:

"Oh, swatter, hold your hand, I beg, and do not slay that humble fly that tickles you with active leg-why should the lovely creature die? The Force that gave you life and breath designed that fly, so blithe and gay; who gave you powers of life and death? Who said that you might freely slay? Because some scientists insist that flies bear germs from place to place, you take a bludgeon in your fist and would exterminate the race. The germs and flies have equal rights with men enjoyment to pursue, and so have skeeters, which, at nights, oft charm us with their loud bazoo. I hold that any living thing has title deeds as good as ours, to loaf around this world and sing, and sip the honey from the flowers. And when I see some husky guy take lethal arms and fiercely pounce upon some unsuspecting fly that does not weigh a half an ounce, I feel that I'd set up cigars, or buy the lime juice by the tub, if some big monster came from Mars and soaked him with a twelve-foot club. When next you go to swat a fly, imagine that the monster came—some freak a thousand cubits high, and held a club above your frame!"

CORRECTION: UNIVERSITY OF TENNESSEE

I read in the August CLINICAL MEDICINE, page 899, that "The Medical Department of the University of Tennessee has been moved from Nashville to Knoxville." Such action was contemplated but, instead, it was moved to Memphis and consolidated with one of the schools there, and still remains as the Medical Department of the State University. The medical school at Knoxville is known as "The Medical Department of the Lincoln Memorial University."

J. D. HENDERSON.

Knoxville, Tenn.

THE ALKALOIDS. UMBILICAL HEMOR-RHAGE. TAPEWORM IN INFANTS

I have been a constant reader of CLINICAL MEDICINE ever since it received its present name, and my interest in it is growing stronger with every succeeding issue.

I have been in continuous country practice since 1875, and have been in my present location for twenty-four years. I began to use the alkaloids about six years ago, and have steadily enlarged my use of them, with the most positive results and to my entire satisfaction. At present I am using nearly forty kinds and find some of them absolutely indispensable. I most certainly would not go back to use the galenicals that have been displaced by the active principles.

I have never attempted to contribute to The Clinic, but now desire to mention some of the cases I have had and tell of the good work done by use of the active principles.

Last winter, during a severe snow-storm, I was called to see an elderly lady who was having a severe attack of epistaxis. She was subject to such attacks, and at three different times it had been necessary to plug the posterior nares to control the bleeding. I gave a hypodermic of sulphate of atropine, 1-50 grain, and within ten

minutes the bleeding had stopped and did not recur.

About two years ago I was called to a neighboring town to see a lady who was suffering with severe menorrhagia during the menopause. I gave a mixture containing atropine, hydrastis and viburnum, and within twenty-four hours the flow had completely stopped, the patient making a prompt recovery.

At one time I was called to a case of acute indigestion, with bad heart symptoms from undue pressure. I gave a hypodermic of apomorphine, 1-10 grain. This emptied the stomach of an enormous quantity of undigested food, and relief was prompt and complete.

I have been using the hyoscine-morphine combination and find it wonderful in obstetric cases. Generally I use the half-strength tablets and seldom require more than two. Frequently a single one will work like magic. Under its use patients lose all dread of the labor, and there is perfect and complete relaxation of all the parts and almost never any laceration. I have never had any trouble with the respiration of the child, and so far no undue hemorrhages.

I once used a full-strength tablet, repeated in one hour, in a case of delirium tremens, and everything worked to a charm.

About twenty years ago I had a case of hemorrhage from the umbilicus in an infant three or four days old; the cord was partially detached and the hemorrhage was very profuse. I tried for a time local astringents, but they completely failed. I then took two curved needles and inserted them at right angles through the integument at the navel and applied a figure-eight silk ligature, cut off the points of the needles with cut nippers, applied a pad and bandage and let it remain nearly a week. The child made a perfect recovery and grew up strong and well.

Thirty-two years ago an infant sixteen months old was brought to me with a large nevoid growth upon the side. I gave the child ether, then removed the growth. The next day the child passed three tapeworms, entire, and of an average length of

three feet. Did you ever hear of a younger child having tapeworm?

AVERY M. FOSTER.

Candia, N. H.

CLOSING THE ABDOMINAL WALL

In every respect, the kind of suturematerial used, the method of introducing it-even to the tying of the sutures over the gauze dressing—the method Dr. Robertson describes in CLINICAL MEDICINE, page 279, is identical with the one published by me in The Journal of the American Medical Association, under the title of "Closure of the Abdominal Incision." My article was published January, 1907, and at the time it was written I was in ignorance of the fact that the idea of this method of closure had occurred to Dr. Haughey of Battle Creek, Michigan, many years before. In 1897, he published a method, in The Journal of the American Medical Association, to all purposes the same as the one I had described ten years

To Dr. Haughey I gladly grant all claim to priority. The only difference in our methods is that he used an over-and-over stitch in the fascia and retained the ends outside the skin by shotting, while I used a quilted stitch, which I found from experience brought the fascia into better apposition, and fastened the ends together over a roller of gauze, which also acted as a dressing for the wound. Subsequent experience with this method has more than fulfilled my expectations, and I am glad that Dr. Robertson has adopted it.

C. G. CHILD.

New York City.

PROPER TREATMENT OF INVETERATE ONYCHIA

The more remedies recommended, the harder the cure. In meeting with a case of onychia, we are many times inclined to think of specific infection and use antisyphilitic measures. But in many cases the trouble is purely local and an antisyphilitic treatment would not have any effect.

About a month ago a patient came to me with onychia on fingers and toes, and if ever there was occasion to think of syphilis, it was then and there. The man told me that he had been treated for one year or more, but instead of getting better he grew worse. He told me what was used and showed me a number of prescriptions. Besides many of these, which clearly indicated that the idea of syphilis was the first thought, I saw what were used: tonics, emollients, astringents, stimulants, yes, even actual cauterization.

"Now, doctor," said my patient, "before all things, for God's sake, do not recommend an antisyphilitic treatment, for I never had any trace of syphilis, and if you do not know what to do for me, say so and I shall

go elsewhere."

I quieted him about it and said, "My dear friend, I have not the slightest intention to institute such proceedings. You

will get well without that."

The way onychia (nonspecific) is managed was fully described, in the Gazette des Hopiteaux, by Prof. Delattre of Toulon. Clean the nails and disinfect them; now put on the common powdered alum, then bandage the fingers. Renew this once a day—and that's all. My patient was completely cured in twenty-two days.

D. ZWIGHTMAN.

Niles, Mich.

EYE-STRAIN AS A SOURCE OF IRRITA-TION IN EPILEPSY

I was much interested in Dr. Kiernan's article on epilepsy, in the May number, and admire his definition, pathology, and treatment. In outlining treatment, he well places at the front, "Remove all sources of irritation." However, in naming these sources, he omits, to my mind, the most common, and fruitful source, the eyes.

Examination has proven that 95 percent of people have an error in refraction, and of these 95 percent at least 90 percent are hyperopes. This means the constant exercise of accommodation during all waking hours, with extra for close work—a constant turning of nerve-force; and as four and one-third pairs of the cranial nerves

go to the eye, we can see how this causes strain.

This muscle of accommodation, from being in contraction so much overtime, by and by reaches a state of spasm, tonic or clonic, and eventually other circular muscles of the body, notably intestinal, rectal, cervical, and vesical, through the sympathetic system, reach a like state of spasm, when largely from that cause we have indigestion, constipation, painful menstruation or cystitis, and only, or largely, by removing the cause can the cure be effected.

It is not necessary that the error be very great. In fact, in great errors the accommodation refuses to try to overcome it and then there is no strain. However, in all cases of epilepsy, even traumatic, let me urge an early and thorough examination of the eye and the correction of even a quarter diopter of error. I do not say this will cure the trouble, but I feel safe in saying that no one thing will do so much, and, coupled with regulation of diet and habits, a cure may be confidently expected.

In choreic children, too, examine the eyes. I have recently fitted two children of 12 and 13 years. Both have lost a great deal of school and taken arsenic to the limit. By correcting the eyes, relieving the nerve strain, prescribing a nutritious diet, both are coming out of school in fine shape. The girl, especially, is rosy-cheeked and so improved in temper since wearing glasses as to be almost a stranger to her family.

Again let me urge, in all nervous troubles look out for reflex troubles from eye strain, and correct at once.

J. F. S.

—, Ohio.

THE AMOUNT OF URINE EXCRETED IN TWENTY-FOUR HOURS

The examination of a single specimen of urine voided gives one very little information, as may be seen from this example: Given two patients, A and B. The amount of urea in A's urine is 1 percent, so also the amount of urea in B's urine is 1 percent. From this, they both apparently are

But if we look at the matter more closely, we find that this is not true, for, if A is voiding 2000 Cc. of urine, he is voiding, in twenty-four hours, 20 Grams of urea, which is about two-thirds of normal. B, on the other hand, who is voiding only 1000 Cc. of urine in twenty-four hours, is voiding only 10 Grams of urea, which is one-third the normal.

From this you can readily see that examination of a single specimen of A or B, each showing 1 percent of urea, really means nothing. You really do not know any more after receiving this report than

you did before.

Doctor, it is highly essential that you know the amount of urine excreted by a patient in twenty-four hours. Of course, casts, formed elements, and crystals, can readily be found in any specimen, but we obtain greater evidences of these pathologic constituents of the urine sediment about three hours after a meal.

Therefore, if you are only going to send a specimen of a single voiding for this purpose, then submit one that has been voided three hours after one of the principal meals of the day; always remembering, however, that the bacteria universally present in urine soon destroy the casts, eat up the albumen and ferment the sugar. In fact, very frequently after forty-eight hours have elapsed no casts can be found in urine, which formerly contained them in large quantities, unless a preservative has been added.

For preserving urine, add (to 4 ounces) either 10 drops of chloroform, 5 grains of camphor, thymol or menthol, 6 drops of formaldehyde solution, or 5 grains of boric acid. Be sure, however, to mention the name of the preservative added, otherwise its unknown presence may interfere somewhat with the analysis.

J. FAVIL BIEHN.

Chicago, Ill.

AESCULIN AND ASPIDOSPERMINE, TWO NEGLECTED ALKALOIDS

There are a few of the active principles that I feel do not get the pushing their

merits entitle them to. One is æsculin. Under the conditions of our modern civilization, it is the exceptional adult patient who has no rectal debility, and who consequently is not benefited by this drug. Strychnine valerate is its best adjuvant. I find it advantageous to add æsculin to the regular clean-up, whether hemorrhoids are present or not.

Another alkaloid which has a wider field than seems to be recognized is aspidospermine. It is indicated, not only in dyspnea, but also in cyanosis or whenever more oxidation is needed, such as a bad fit

of the "blues."

In cyanosis from carbon monoxide or anesthetics, try a hypodermic of aspidospermine and watch the color change. Or save time by dropping the dose under the patient's tongue; effects are just as prompt by the buccal route. But you must use big doses to neutralize the anesthetic, 1-2 grain being needed for an adult and 1-12 grain for an infant under one year. This usually will have to be repeated, as the effect does not last long.

CHAS. F. MORRISON.

Klamath Agency, Ore.

[You are right. Many of these active principles would well repay study. We set down what we know of them, but do not pretend that is all that might be known. Every report we have received on æsculin has been favorable. Would aspidospermine be of use in the asphyxia of Asiatic cholera?—ED.]

"LIGHT NEVER ON LAND NOR SEA" THE SITUATION IN MEXICO

Dr. Robinson is flinging scintillating glints of light into the weird haunts of human wretchedness and misery, of more vital importance to suffering humanity than all the gospels living or dead, which the medical fraternity of whatever school or pretension would do well to study and ponder. Some squeamish and more fanatical brothers are likely to pounce on this new departure with both feet, without reflecting that it assails the curse of earth—ignorance—that is responsible for all our

ills and woes, physical, mental, and spiritual. Light, light, is what is needed, and more light and just such a course as Doctor Robinson is urging us to adopt and to practise is the medicine of medicines for the want of which the world is perishing. It is high time that ignorant prudery should have an end.

I am out of the proper latitude to take up the grand and vital question elaborately; I an engulfed in such profundity of stupid ignorance, the legitimate fruitage of long dark centuries of slavery, beneath the elevating influence of scientific light, that any effort to redeem the bottom strata of human life here in less than several generations would be love's labor lost. The truth is sad, but inexorable.

In CLINICAL MEDICINE for May appeared some deductions of mine, written under the erroneous impression that the revolution had collapsed, the Mexican government having been misled to announce it under positive control; but that was the only mistake. The situation has not improved. The insurgents are armed, demanding their promised homesteads—which likely will be the same as the forty acres and mule promised the freedmen after the Civil War. They are demanding all the postal, customhouse and other public employments in the government's gift.

A large element of the insurgents was recruited from savage Indians, cutthroats and bandits released from the jails, and peons taken from plantations, there being few respectable Mexicans, save officers, in the rebel army. In this vast belt, where sympathies were almost a unit against the government, six persons above the criminal and peon classes took up arms against the Diaz rule. A thousand would have been about the due number, with none voluntarily for the government. Such demonstration was not made because of fear of the federal power, but want of faith in a new governmental experience. Few, even of his most radical opponents, doubt the sincerity of Madero, yet his ability to perform is another and more serious problem. The socialistic fanatics, largely Americans, in Lower California and Sonora, defy Madero. No one yet knows how many rebels may refuse to be mustered out and surrender their arms. Federal employes ousted by rebels will have grievances. American capital that supported the revolution needs another civil war to superinduce American intervention. Thus thoughtful Maderists feel that they stand on slippery ground.

We Americans who are friends to the peaceful prosperity of Mexico hope there will be but one candidate for president, and that with Senor de la Barra and General Reyes, the strongest men in Mexico, in the cabinet, the danger of a subsequent revolution, due to electional disappointments, may be averted.

The damage to material prosperity and check to progress are utterly beyond rational computation. Years of peaceful industry will be required to heal the wounds.

The profession would probably enjoy reading the chapter Doctor Robinson would write were he here to see the mother in the kitchen before sunrise getting breakfast; to watch the ignorant Indian midwife, with not a semblance of aseptic precaution and no postpartum care save solutions of mague leaves; to find puerperal fever and eclampsia unknown, except only in collegebred women, but foreigners often victims of abortion and frequent perilous and difficult childbirths. I do not participate probably more than once in each hundred births in my territory, the population being practically all of the immune natives, whether rich or poor.

Sterilizing criminals and victims of incurable hereditary transmissible diseases, and the breeding of healthful children in the enchantment of homely love is the true gospel to preach and to practise.

ROBERT GRAY.

Pichucalco, Chiapas, Mexico.

ATROPINE AND OIL FOR BILE DUCT OBSTRUCTION

The rational application of definite principles in medicine is both possible and needful for the successful treatment of disease; and further, the determination of the exact nature of defective bodily functioning and choice of the accurate remedy is more readily possible by the use of the active

principles. The present paper is but the briefest therapeutic note, still it conveys a suggestion of the use of atropine in cases of obstruction of bile or pancreatic secretion when such obstruction apparently gives rise to reflex spasm affecting the musculature of the duodenum and the visceral motor mechanism.

Moynihan makes mention of such spastic action. Older writers had not, apparently, mentioned the effects of obstruction of the common bile-duct when the obstruction, by pressure or irritation, produced a spasmodic, or pain-reflex, effect upon subjacent tissue. Such a pain-reflex, while causing disturbance of the musculature and tonic or clonic spasm, would also cause a reflex hyperactivity upon the glandular elements of the pancreas and liver.

Atropine, let us remember, meets two cardinal indications, physiologically con-

sidered, namely: (1) It relaxes spasm in the musculature. (2) It diminishes gland-

ular secretion.

With both of these indications we have to deal in cases of impacted gallstone. The writer has seen cases which clinically appeared to be obstruction of the gall-duct, and one which absolutely was a stoppage of the sinus of Vater; the passage of stools of food unchanged by any intestinal ferment confirming this diagnosis.

Analyzing the various possible causes of vaterian obstruction, we have:

(1) Gallstone. (2) Impacted catarrhal matter. (3) Torsion of sinus, (a) internally, (b) externally. (4) Intestinal impaction. (5) Ulcer or injury of the intestinal wall at the site, cicatrix, etc. (6) Spasm, reflex or neurotic.

In using atropine to meet any such indications, we must first have definitely established the existence of spasm, and, by that,

the need of relaxation.

Administer the selected salt of atropine in suitable, small, divided doses. For an adult give 1-100 grain as often (by mouth) as once every three or four hours, up to physiologic pupillary reaction; then cease. Proceed again in twenty-four or thirty-six hours in a similar way.

In connection with this, the patient must be purged. More than this: give an intestinal lubricant. I have found the white odorless and tasteless liquid petrolatum, as used by Dr. Wm. D. Robinson years ago in intestinal fermentation, a most valuable adjunct.

The peculiar penetrative effect of liquid petrolatum sets it apart as a remedy of the greatest value in obstructive conditions. I have effected the cure of cases of marasmus by frequent small doses of the white liquid petrolatum, which astonished me. The value of petrolatum in catarrh or irritation of epithelial derivatives, I have assured myself, is a distinct one. Many times people tell me of pouring kerosene from a lamp into the throat of a croupy child and observing instant relief.

In these catarrhal and irritative gall-duct cases this product is decidedly useful, as may be shown by a few examples.

Case 1. A succession of attacks, accompanied by jaundice and final emaciation. Stools contained undigested potatoes and carrots; fat was unchanged; there was pain at the site of the sinus of Vater. Cancer had been diagnosed. Iodine was applied over the gall-duct; also dry heat in a steady concentrated current. Internally atropine and white liquid petrolatum were given. In thirty-six hours a hard fecal mass feeling like a stone was passed, but was lost. However, the jaundice vanished and intestinal digestion returned immediately.

Case 2. Diagnosis of gallstone, previously made, the patient using morphine regularly for the biliary pains. I substituted atropine for the morphine and added the petrolatum product named. Immediate relief resulted, followed by the passage of a pyramidal stone, the sharp edges of which explained much.

Case 3. A case of gallstone. More than two hundred calculi being passed under the relaxing influence of atropine and olive oil.

Case 4. Infant presenting a dim-yellow coloration. I diagnosed marasmus. The use of while liquid petrolatum and of a diluted thymol solution, in alternate doses of 5 drops each hour, effected a complete recovery.

In the adults, after the first restoration of function to the intestines, I have, of late years, employed the succinate of sodium as recommended by contributors to The American Journal of Clinical Medicine. What this agent does, apparently, is to maintain a favorable *status quo*.

When does gall-duct obstruction become operable? Answer: Whenever a surgeon is at hand. This is not intended as a reflection upon the surgeon, for, frankly, operative treatment often is best. Personally, though, I am not anxious for any obviable major operation, and. therefore, in any treatment which carries us safely between the Scylla and Charybdis of operation or death I find a welcome friend. As someone has wittily remarked: "No man dies a death triumphant with a disease below the belt."

When a morbid, irritable temperament is brought to me for treatment (along with a disease), I feel sure that the ailment is catarrhal or in the epithelial derivatives, and in the channels of the abdominal glandular parenchymata, principally of the alimentary canal.

Just as an idea: the state of pupillary reflex is interesting. In cases of reflex irritation from the gall-duct, I have seen myosis. Is this a part of the syndrome?

T. H. EVANS.

Freeport, NY.

GLYCERIN AS A BLADDER "LAXATIVE"

Otto Franck (noted in Therapeutic Medicine, 1911, July) injects a 2-percent solution of boric acid in glycerin to overcome the not infrequently occurring postoperative vesicular paresis and to avoid the use of the catheter and its attendant dangers. He does not introduce a catheter, but simply injects into the urethra 15 to 20 Cc. of the solution. About 10 Cc. usually returns, while only from 5 to 10 Cc. enters the bladder. The glycerin acts as a stimulant to bladder peristalsis and within twenty minutes there is usually a spontaneous evacuation of urine. The ability to micturate spontaneously persists. special irritation occurs.

The author also recommends this method in other forms of retention, especially in paralysis of neurogenous and mechanical nature. He also has used the method in strictures and prostatic hypertrophy and has succeeded in bringing about spontaneous evacuations, if only for a time. In those cases in which the catheter can not be passed, the plan has a peculiar indication. Franck appropriately calls the glycerin a "liquid catheter." In acute infections of the anterior urethra, the method is contraindicated, although the glycerin would probably be less likely to carry the infectious agents inward than a catheter. In fact, glycerin has a distinct antiseptic action and was originally used in the bladder for this purpose in cystitis.

SUNSTROKE. TYPHOID FEVER. WHOOPING-COUGH

The August number of The Clinic is at hand and it is chock-full of good things, as usual. However, in reading over my note (p. 891) relative to the treatment of sunstroke, I find that I omitted to state that the patient should be placed in a recumbent position in a shady place if possible. As such cases need prompt treatment, while shady retreats and appropriate remedies are not always conveniently near, one must, of course, do the next-best available thing under the circumstances, to avoid any delay. Hence giving of whisky often may be, not only permissible, but imperative.

I note what The Clinic has to say about intestinal antiseptics in typhoid fever. As an internal antiseptic remedy for infectious and communicable diseases, I prefer—after having first cleaned out the intestinal tract with calomel—the administration of the old-fashioned simple mixture of sulphur and molasses. If there is any portion of the human anatomy which the sulphur will not permeate and disinfect, I have yet to discover it. I believe it to be superior to calcium sulphide as a disinfecting agent, having tried both. The objection to its use is its odoriferousness. [Sulphur is good—but calx sulphurata much better—we think.—Ed.]

There is another fact I wish to mention in regard to the treatment of typhoid fever, namely, the necessity of guarding against intestinal hemorrhage. When, in these cases, you see a dark-brown incrusted tongue, as rough and as hard as burnt sole-leather, it is a danger-signal that calls for the immediate administration of oil of turpentine. This will clean off and soften the tongue in thirty-six hours. Commence by giving 15 drops in the white of egg every hour or two; and if there is hemorrhage from the bowels, give the oil of turpentine clear in teaspoonful doses. It will work like magic. Try it.

A few years ago I had five members of my own family ill with typhoid at one time, resulting from the seepage of sewage from a neighbor's cesspool into my well, and severe intestinal hemorrhage occurred in one of the victims. Oil of turpentine being at hand, I administered it at once and controlled the hemorrhage; and I then gave it to the other four, as a safeguard against similar attacks.

While I am about it, I should like again to call the attention of The Clinic readers to the efficacy of silver iodide as a superior remedy for whooping-cough. For more than forty years I have observed the speedy beneficial effect of this agent when numerous other measures had failed to cut short or ameliorate this distressing malady.

These "little drops of water and little grains of sand" are doubtless familiar to the members of The Clinic "family," but it sometimes is beneficial to have a sort of quiz-rehearsal, to be reminded of even the simple remedies within our reach in cases of emergency.

GEO. D. STANTON.

Stonington, Conn.

OBSCURE INTESTINAL DISEASE

What would you have done in these two cases? Infant, male, 22 months old, has always been healthy and is large for his age; raised on the bottle after the seventh month.

I was called to see him Friday evening about 8 p. m. and found temperature 102° F. in the groin, pulse 114, bowels slightly constipated and bloated. He was given 1-4 grain of calomel every half hour for four doses resulting in dark-green stools, not profuse or of particularly bad odor. He seemed somewhat better for the next four days, was up playing around a part

of the time, and not much attention was given him, as his little brother was very sick—of which I will speak later.

One Wednesday, after the funeral of his little brother, his mother noticed that he was sleeping more than usual. She felt him and he did not seem hot or feverish; but she sent for me on account of his sleeping so much. His temperature in the groin, as he slept, was then 105° F., pulse 118. His face and hands did not feel hot, nor did his feet. I had prescribed for him the first night I saw him, calomel, 1-4 grain every half hour for four or five doses; arsenite of copper and the sulphocarbolates of zinc and soda every two hours. This had been kept up for the four days. Bowels were still showing green stools, with one or two exceptions, when they showed some bile with the movement.

When I found his temperature was 105 degrees, I irrigated the bowels with normal salt solution and got a few green stools. I immediately increased the arsenite of copper to 1-200 grain, and sulphocarbolates of zinc and soda to 5 grains at a dose, given every two hours for ten doses in twenty-four hours. For the fever I gave aconitine, digitalin and veratrine every twenty minutes for six doses; waited two or three hours, then repeated. I gave also one-third of a granule of aconitine, and onefourth each of digitalin and veratrine at a dose. The medicine did not seem to have any effect on the fever, as the temperature would frequently shoot up to 105.5° F.

We now commenced to give him hot baths, having the water tepid to begin with and then added water to as hot as he could bear it. After taking him out of the bath, we wrapped him in a blanket and sweated him for one or two hours. This would bring his temperature down 2 to 4 degrees, and once, the mother said, it was normal for a few hours. She took the temperature three times to see if it was true. The bowels were irrigated every six hours.

After the second day of the relapse, peroxide of hydrogen was used in the injections—four ounces of the peroxide solution to sixteen ounces of water. This seemed to bring away more of the green stools than any other injection. Some of

the stools were as green as if he had chewed green grass.

After the relapse he was not given a particle of milk, but all the water he could drink and oatmeal water, and the last two days malted milk; but we could not keep that fever down, except for a short time.

For two days we wrung woolen cloths out of a solution of magnesium sulphate, one ounce to a quart of hot water, and changed every half hour. This was kept covered with dry woolen cloths. The little fellow's pulse never was over 120 and most of the time below that; good and regular.

He was given doses of epsom salt and castor oil, and the calomel was kept up. The three last days I added echinacea and emetin to the arsenite-sulphocarbolate solution. The little fellow had inunctions, every four hours, of quinine in his arm-pits

and groins.

I was with him three nights all night. His mother is a graduate of the Battle Creek school of nurses and we had good help. About two hours before he died he showed signs of convulsions: eyes were set, muscles of face twitching. We put him in the hot bath with mustard. I took his temperature just before putting him in the bath, and it was then 105.5° F. His face was pale. We kept him in the bath for one-half hour before the eyes relaxed. In the meantime I had given him a hypodermic injection of glonoin and one of strychnine while in the bath. We took him out and wrapped him in blankets. He became moist, but slept on to the eternal sleep. I took the temperature in the arm pit just a few minutes before he died and it was 107.6° F.

Now, brother, how would you have handled a case like this. Some might suggest ice, but there were but very few times that the little fellow's head and feet

or his body felt hot to the touch.

And now I want to tell you of his little brother, 7 months old, who had never been sick a day of his short life. He was a fine, healthy-looking boy. As stated, I was out to see the other one on Friday night and this little fellow was well as ever. Saturday at 1 p. m. I was called to see the smaller one, who was panting for breath and at

every breath his little head would jerk. His temperature was 102° F., pulse 118, some rales in the lungs, bowels constipated, stools green; a very little cough and that tight.

I gave him an injection of normal salt solution, calomel, 1-4 grain every half hour for four doses; aconitine and veratrine for fever. Woolen cloths were wrung out of hot water and put on his lungs changed every twenty minutes and this kept up for twelve hours. I gave him bichromate of potassium as expectorant and tried to give enough to vomit. Then I gave emetin and apomorphine to make him vomit, but could not succeed. His temperature remained about the same. The bowels did not move very freely. My consultant, who was a man of forty-five years' experience, recommended doubling the doses of the calomel and to follow with castor oil, which we did, but without avail.

The little fellow died in convulsions thirty-six hours from the time I saw him. I used nuclein for three days in the first case. Had the same consultant in both cases. This baby was breast-fed.

W. E. D.

—, Iowa.

[We have very carefully considered the data presented in your communication. Frankly, doctor, we are unable, with our limited knowledge of conditions, to make intelligent criticism or even to venture a diagnosis.

You do not state anything about the reflexes, condition of pupils, presence or absence of opisthotonos. That you had to deal with a severe enteric disorder is evident. In the second case at least we should be inclined to suspect the presence of the intestinal form of grip. You do not state whether there was any enlargement of the liver; neither do you give us any information relative to the amount of urine voided or character of the same.

The conditions present in case No. 2 do not seem to resemble very markedly those observed in case No. 1. It is just possible that the cause of death in the latter instance was bronchial pneumonia; the child being practically suffocated by his own

secretions. The extremely high temperature observed just before the death of the 22-months old child leads us to suspect meningeal involvement, and as we have already pointed out, the other symptoms lead us to the conclusion that the bacillus Pfeiffer was the infecting bacterium, the digestive tract, and perhaps later the meninges, being particularly involved. An autopsy might have proven instructive.

As you will readily see, it would be presumptious on our part to criticise the treatment when we are unable to decide definitely as to the character of the pathologic conditions you have to contend with. We present your description of the case to the readers of CLINICAL MEDICINE, for comment.—Ed.]

CHICKEN-CHOLERA AND SULPHO-CARBOLATES

In a discussion of the principles of sexual selection based on the gay plumage of male birds, one of the participants cut the matter short by denying the possibility of basing a scientific argument upon what might be supposed to be going on in the mind of a hen. However, in studying what goes on in the body of a hen, we may at least find scientific testimony as to the action of medicines when they are administered. Some experiments recently made at the Colorado Agricultural Experiment Station and published in News Notes of May 12 may prove of interest. I will let Professor Kaupp tell the whole story himself:

"The Veterinary Section of the Colorado Agricultural Experiment Station has been experimenting with different remedial agents with the view of finding some drug that would at least curtail the enormous loss among barnyard fowls from the various forms of diarrheas.

"Space will permit the discussion of only one agent. The one that has thus far given us the best results contains the sulphocarbolates of sodium, zinc and lime. One flock consisted of sixty birds. Several were sick at the time treatment commenced and four had died. The discharge from the bowels was of a greenish-yellow color, some-

what simulating fowl-cholera. One 30-grain tablet was dissolved in a quart of water and this fluid was mixed with bran and corn-chop. The mixture was then fed in clean troughs. In this way each bird got approximately 1-2 grain of the remedy. This was repeated night and morning. No additional birds became sick, only two of those sick died, and the rest recovered.

"Another flock consisted of 175 baby chicks. As soon as these birds were taken from the incubator, they were fed the unhatched eggs that had been cooked and chopped. This mixture was reported to possess an offensive odor. The birds began dying with symptoms of diarrhea, white, pasty vent, weak, dull, droopy wings, etc. One-half the flock died before treatment was begun. One-half tablet was dissolved in warm water and the bread saturated with it. The birds immediately quit dying.

"Still another flock consisted of 200 birds, including a few turkeys. Cholera had appeared on the premises the fall before. The outbreak was studied in the field and laboratory. The germ (bacillus avicepticus) was isolated. In the last outbreak fourteen birds had died and several were sick. Similar treatment was used as in the above flocks, except that powder was used instead of the compressed tablets. One rounding tablespoonful was dissolved in each two gallons of water. This water was kept constantly before them. No more birds were taken sick and no more died after the sixth day.

"The above is a good illustration of three types of diarrhea in which we have found this drug by far the best agent tried.

> B. F. KAUPP, Pathologist, Colorado Agricultural College Fort Collins."

That the sulphocarbolates are effective in diarrheal complaints in human beings is no news. Many will also second Professor Kaupp's findings, that they are the most efficient remedies for these troubles as yet developed. It is gratifying to note that this beneficial influence may also be utilized for the diseases of animals, and that the breeder of chickens may be saved the enormous loss assessed upon him by chol-

eraic maladies. Several reports have been made of similar success won in treating hog-cholera, and there is no known reason why these salts should not control such

affections in all animals.

My own work with the sulphocarbolates began over thirty years ago. Cholera infantum has long since been erased from my list of lethal maladies; in fact, the disease itself has become extinct in my families, where every disturbance of digestion is promptly met by the clean-out and disinfectant method. I rarely receive a report nowadays upon the use of the sulphocarbolates, because they are a matter of course. Sometimes a record of failure comes in, which, for lack of anything new on the topic, I always run out. Invariably the failure falls into one of three categories:

1. Impure sulphocarbolates are given, which will not be retained by the stomach.

2. Too small doses are given for the need. There is no top to the dosage. One man writes that he has given 700 grains of sodium sulphocarbolate a day! never required over 120 grains a day, but I thoroughly empty the bowels at the start.

3. The sulphocarbolates are given after the case has become hopeless and the patient is dying of perforation, hemorrhage, heartfailure or exhaustion, against which these remedies are powerless as remedies, being

potent only as preventives.

The sulphocarbolates are never "cures" for typhoid fever; they are solely intestinal antiseptics, and whenever and in so far as intestinal antisepsis is useful during typhoid fever, the sulphocarbolates are effective.

A corkscrew is excellently devised to win access to a thirst-dispelling liquid, but it is

a very poor door-key.

Of late the prime importance of fecal toxemia is being comprehended. It has been universally taken for granted that the bowels take care of themselves, and that they should be interfered with only when absolutely necessary.

Dame Nature was trusted implicitly, far more than she deserved. Metchnikoff was mainly responsible for the awakening, when, in his picturesque way, he showed that the colon was an evolutional relic, not essential, but probably the main cause of the pathologic conditions that shorten life. Fifty years ago people would have resented such a suggestion as an imputation against an allwise and benevolent Creator. Now they ask anxiously whether it can be true, and what they should do.

Let any clinician take up and study his own digestion, note how the vagaries of temper and mood, the elation and despondency, the euphoria and cacophoria of his life depend upon his digestion. Let him study the mental weariness and sluggish somatic and psychic movement when he has a colon load of retained feces to poison the wellsprings of his being; and then the happy, alert bouyancy following the complete abatement of the nuisance. Yet, though he be a professor, a surgeon of many cuttings, illustrious in the council halls, a very Saul among his brethren, even yet will he be edified and win merit by the study of his own colon.

W. F. WAUGH.

Chicago, Ill.

NEWS NOTES

Kansas City has put a stop to the houseto-house sale of medicine. Anyone who hereafter distributes patent medicines in this way is in danger of arrest.

The United Fruit Company has agreed to give \$5000 per year, for five years, to Tulane University, in New Orleans, for the establishemnt of a school of tropical medicine. With this and other generous subscriptions, the success of the school seems assured.

A conference is to be held in Nashville, Tennessee, September 14 to 16, to consider means for the suppression of the hookworm disease in the South. This conference will be attended by the district and state directors of the Rockefeller Hookworm Fund, and by many secretaries of the southern boards of health.

Two years ago, as a result largely of the efforts of our friend Dr. H. C. DeVighne, Congress passed a medical practice act for

Alaska. The first conviction under this law was made July 20. Dr. Jos. Weyerhorst of Juneau was sentenced to imprisonment for practising medicine without first securing a license.

The State of Kansas is the next to abolish the common roller towel. The State Board of Health has ruled that this menace to the public health must go after September 1, 1911.

Kansas has swatted the fly, muzzled the dog, and now she is going to shave the cat—at least that is the recommendation of Dr. Deacon of the State Board of Health. He has found innumerable germs on the hair and whiskers of poor pussy.

Query: Before shaving the Kansas cat will it be necessary to procure a license from the State Board of Barbers' Examiners?

The American Practitioner and News quotes the following from Dr. Ben Trovato: "In reply to a letter from a young German friend who desires to know something about our laws regulating the practice of medicine, in order that he may decide whether or not to come here to make his living, I have written that in the majority of the states almost anybody may practise without a license except a regular graduate in medicine."

A very unique method of advertising their sect was discovered by the osteopaths at their annual meeting in Chicago in July. The proposal was seriously made that several hundred patients should be treated at some large central hospital by osteopaths, homeopaths, eclectics, and "allopaths." The osteopaths were willing to stake their professional experience on their ability to carry off the honors. In one respect our osteopathic friends have the medical profession beaten to a frazzle—their "advertising" methods are in a class be themselves.

One of the most interesting magazines that has recently come to our attention is *The Simmons Magazine* (150 Nassau St., New York City.) It is high class in every

respect, and the subscription price is only \$1.00 per year. In the August number there is a fine article upon Tacoma, "The City of Destiny," an article about Saratoga Springs, some fine stories by Margaret Hobson, C. J. Henrikson, Alex Gardiner, Edgar S. Nye, and others. What particularly interested us, however, was the "medical department" conducted by our old friend, Dr. Ernest F. Robinson of Auburndale, Massachussetts. We can honestly commend *The Simmons Magazine* to our readers.

The Congressional Record has been used for many purposes, but heretofore we believe it has never been employed to promote the interests of a medico-religious sect. Recently, however, the mails have been loaded with the franked speech of Senator Works of California, who in an address to the Senate gave an account of his conversion to Christian Science, telling how he and his wife were cured of disease and his son reclaimed from the drink habit. This assuredly should give a decided boost to the Christian Science propaganda. I suppose next we may expect one of the Senators from Ohio to fill a number of the Record with stories of cures effected by that medical marvel, "Peruna." Why not?

N. A. R. D. Notes and The Western Druggist feel a good deal elated because the section of pharmacology, at the last meeting of the A. M. A., passed a resolution recommending physicians to "relegate to pharmacists the dispensing and limit themselves to the prescribing of medicines." However, these journals fail to emphasize the fact that this resolution also stated "That there are conditions existing which require physicians to dispense their own medicines." They also fail to grasp the fact that this resolution was passed by one, probably the smallest, of the twelve sections, which has among its members and in attendance every year a considerable number of "by courtesy" members who are not physicians but druggists. As representing the opinion of the A. M. A. as a whole, this resolution has no significance whatever,

Are you making your plans to attend the annual meeting of the Tri-State Medical Society of Illinois, Iowa and Missouri, to be held at Fort Madison, Iowa, on September 26 and 27. The president is Dr. Walter Urban Kennedy of St. Louis, Dr. Thomas G. Atkinson, editor of The Medical Brief, is listed for the address in medicine, and Dr. George W. Crile of Cleveland, Ohio, for the address in surgery. A fine program has been prepared, and our brilliant and brainy friend, Dr. Emory Lanphear, the treasurer, will participate actively in making the meeting a tremendous success. Every doctor should be in attendance who can possibly arrange to do so.

The thirty-seventh annual meeting of the Mississippi Valley Medical Association will be held at Nashville, Tenn., Tuesday, Wednesday and Thursday, October 17-19, 1911. The general meetings will be presided over by Dr. Robert H. Babcock, of Chicago, who, though blind, is one of the most eminent physicians in the country, having written two standard books upon diseases of the lungs and diseases of the heart and blood-vessels. Every word in each book Dr. Babcock wrote himself upon a typewriter. Dr. Babcock's presidential address will be upon "Medical Tendencies"; and the address in surgery will be delivered by Dr. Joseph D. Bryant, of New York, entitled: "The Indebtedness of Posterity to the Pioneer Surgeons of the Mississippi Valley." The address inmedicine will be given by Dr. J. C. Wilson, of Philadelphia, entitled: "Doctors and the Public." Among the celebrities who will attend are two English physicians, Dr. C. W. Suckling and Dr. D. Billington, both of Birmingham, who will take special part in a symposium upon the displacements of the abdominal organs.

The "carrier" has become an important factor in the problem of prevention of infectious diseases. We have known for years that typhoid-fever germs might be harbored by individuals, in the alimentary canal or the bladder, for months, yes, in some cases, for years. We now know that diphtheria germs may linger, for an almost

indefinite period, in the throat of children who have had diphtheria, perhaps so light that the disease was not recognized. The latest development of this kind is in cholera. It now seems certain that many of the untraceable outbreaks are due to the fact that some unsuspected individual, who went about his duties in what appeared to be perfect health, was carrying germs of the disease with him everywhere. Modern preventive medicine now takes that factor into consideration. The health authorities in New York, for instance, are now examining the excreta of every immigrant coming from an infected port. While the "carrier' seems to be the greatest danger at present. the fact that we recognize his presence and are taking proper precautions will greatly lessen the danger of an epidemic.

According to no less an authority than Dr. Howard, chief of the Bureau of Entomology, a single house-fly may carry from 550 to 6,600,000 bacteria, bearing the germs of typhoid fever on its legs and in its digestive organs. One single footprint of a house-fly was found, by Cobb, to have left 800,000 fungus spores! One million two hundred and fifty thousand is the average number of bacteria per fly found by Esten and Mason in experiments with 414 flies which had fed at cow-stables, garbage-barrels, pig-pens, etc. To prevent the pest of flies, do the following:

First: Screen all houses, and especially the kitchens, all restaurants, all grocery stores; every place where flies can get at food. Remember that you are not merely screening out an unpleasant nuisance, but an actual vital danger.

Second: All filth (manure, garbage, human excreta) must be covered by screening or destroyed, so that flies cannot breed and feed in it and bear from the premises a curse of disease-germs. We have no right to breed death for others.

Third: The whole community must work together, planning to end the fly scourge. That is what Major Wanhill did with his typhoid-fever-afflicted British troops in Bermuda. In two years he almost wiped out typhoid fever, largely by ending the fly nuisance.

State-Board Examination Department

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ANATOMY

1. Give the general classification of bones.

Classified as Axial (75-) and Appendicular (122).

Skull (8)

Face (14) Trunk (53) Vertebræ (24)

Thorax (25)
Pelvis (4)
Pedicular divided into upper and lower extremities:

Upper extremity (64) Shoulder (4)

Arm (2) Forearm (-Hand (54)

Lower extremity (58) Thigh (2) Leg (4) Foot (52)

Foot (32) Bones are classified further into: Long (90) Short (30) Flat (38)

Irregular (39),

2. Name the openings of the heart.

Aortic, vena cava, pulmonary (4), pulmonary artery, auriculoventricular, coronary sinus.

d. Give branches of internal carotid artery and their distribution. (97p11)

Tympanic, supplies tympanum

Arteria receptaculi, supplies walls of the sinuses, gasserian

Anterior meningeal, supplies meninges, especially pia mater

arachnoid.

Ophthalmic, supplies eye proper and orbit of eye.
Anterior cerebral, supplies anterior part of cerebrum.
Middle cerebral, supplies brain and meninges.
Posterior communicating (part of circle of Willis), supplies brain

Anterior choroid, ends in choroid plexus of brain

4. Describe the appendix vermiformis. Locate McBurney's point for performing appendectomy.

point for performing appendexiony.

The vermiform appendix is a worm-like, tubular outgrowth which springs from the inner and posterior surface of the cecum, about an inch below the ileocecal orifice. It may point in any direction, but usually over the brim of the pelvis into the pelvis; upward behind the cecum; upward and inward toward the spleen. Its size varies. It is usually about 3-1-2 inches long and 1-4 inch thick. Its lumen varies with the age of the individual, being largest in the young, and smallest in the aged. It is covered with peritoneum, and has serous, muscular (longitudinal and circular), submucous, and mucous layers, and contains lymphoid nodules. McBurney's point is a point midway between the umbilicus and the anterior-superior spine of the filum, and one-half inch above it.

What is the origin, action and nerve supply of the rectus femoris muscle!

The rectus femoris arises by two tendons: the straight, from the anterior inferior spine of the illium; the reflected, from a groove above the brim of the acetabulum, and is inserted into the tubercle of the tibia, by way of the quadriceps extensor tendon. (Some authors give the insertion into the patella.) Action, to extend the leg. Nerve, anterior crural.

Give the boundaries of the thorax.

The thorax is formed by the sternum anteriorly, ribs and costal cartilages laterally, and the bodies of the dorsal vertebra posteriorly. Superiorly, by the first rib, and inferiorly, by posteriorly. So the diaphragm.

Describe the intestinal tract and name its divisions. The alimentary tract is a musculomembranous tube, about 30 feet in length, extending from the mouth to the anus, is lined throughout with mucous membrane, furnished with several accessory organs, and performing the functions of ingestion, mastication, insalivation, deglutition, digestion, assimilation, and egestion. It is divided into mouth, pharynx, esophagus, stomach, small intestine (duodenum, jejunum, and ileum), and large intestine (cecum, colon, and rectum). The first three lie above the diaphragm, the rest below it.

Describe the sympathetic nerve.

The sympathetic nerve consists of a series of ganglia, connected together by intervening cords, one series on each side of the median line of the body, partly in front and partly on each side of the vertebral column, beginning in the ganglion of Ribes, on the anterior communicating artery and ending in the ganglion impar in front of the cocyx: three great gangliated plexuses situated in the thoracic, abdominal and pelvic cavities, smaller ganglia in relation with the abdominal viscera, and numerous communicating and distributing nerve-fibers.

9. Give a general description of the spinal cord.

9. Give a general description of the spinal cord. The spinal cord is that part of the cerebrospinal axis which is situated in the spinal canal. Its length is about 16 to 18 inches, and it terminates at the lower border of the first lumbar vertebra, in the cauda equina, or filum terminale. It is cylindrical in form, with two enlargements, one in the cervical region and one in the lumbar. It is composed of gray and white matter, the gray being inside. Has three enveloping membranes, eight fissures, four columns, and a central canal.

10. What are the cranial nerves? What do they supply? Name function of each.

The cranial nerves arise from the brain direct, and supply organs situated in the cranium or emanate through fissures in

Olfactory, supplies nerves of smell. Function, special sense.

sense.
2. Optic, supplies eye. Function, special sense.
3. Motor oculi, supplies eyeball muscles. Function, motor.
4. Patheticus, supplies superior oblique muscle of eyeball.
Function, motor.
5. Trifacial, supplies head-, face- and cheek-muscles.

ion, motor and sensory.

Abducent, supplies external rectus of eyeball. Function, Function

motor. Facial, motor nerve of face, and nerve of facial expression.

h. Function, motor. Auditory, supplies apparatus of hearing. Function,

S. Auditory, supplies apparatus of hearing. Function, special sense.

9. Glossopharyngeal, supplies posterior one-third of tongue and lateral part of palate, muscles of pharynx, and parotid gland, tonsils, anterior palatine arches, soft palate. Function, motor, sensory, and special sense.

10. Pneumogastric, or vagus, supplies meninges, external ear, pharynx, larynx, heart, lungs, esophagus, stomach, spleen, liver. Function, motor and sensory.

11. Spinal accessory, supplies sternomastoid and trapezius muscles. Function motor.

12. Hypoglossal, supplies meninges, neck-muscles, and intrinsic muscles of the tongue.

CHEMISTRY, ETIOLOGY, AND HYGIENE

CHEMISTRY

Define valence, acid, base. What is valence of Ca, Na, K. As, Ba?

An acid is composed of an electronegative element or radical with hydrogen, part or all of which hydrogen it can part with in exchange for an electropositive element, without the formation of a base. A base is a substance which can enter into double decomposition with acids to produce a salt and water. Valence is the combining power of an atom of an element as compared with that of an atom of hydrogen. Calcium is bivalent; sodium and potassium are univalent. Arsenic is a triad; barium is a diad.

2. Give a test for arsenic.

Reinsch's test is as follows: To the suspected fluid add a little pure HCl; suspend in the fluid a small strip of bright copper foil, and boil. If a deposit forms on the copper, rouse the copper, wash it with pure water, dry on filter paper, but

be careful not to rub off the deposit. Coil up the copper, and put it into a clean dry glass tube, open at both ends, and apply heat at the part where the copper is. If arsenic is present there will appear in the cold part of the tube a mirror which will be found on microscopical examination to consist of octahedral crystals of arsenic trioxide.

3. Give a test for hydrocyanic acid.

Add ammonium sulphydrate and evaporate to dryness; en add solution of ferric chloride. A red color results from the reaction

State the occurrence and properties of oxygen, of hydrogen,

Oxygen. Occurrence: Free in the air and in combination in water, rocks, minerals, etc. It is more abundant than any other element, forming about 47 percent of the earth's crust and atmosphere. Properties: It is a colorless, odorless tasteless gas, heavier than air, slightly soluble in water, has an intense affinity for other elements, combining with almost all except fluorine. It is necessary to life, and is a supporter of combustion

bustion.

Hydrogen. Occurrence: Free in volcanic gases, in fire damp, and the gases of the intestines. In combination: in water, all acids, in many organic compounds. Properties: A colorless, tasteless, odorless gas, the lightest known substance; it has a great affinity for oxygen; it supports neither combustion or respiration; it is a necessary constituent of all acids; the gas will burn with a pale blue flame.

Nitrogen. Occurrence: Free in the air, in combination in nitrates, in ammonia, in many organic substances. Properties: A colorless, odorless, tasteless gas; it neither burns nor supports combustion nor respiration; it has no tendency to unite with other elements.

other elements

5. What is the formula for carbolic acid? Antidote? CeH5 (OH) Alcohol, sodium sulphate, and vinegar are

ETIOLOGY AND HYGIENE

1. Give etiology of pelvic peritonitis.

Due generally to sepsis or gonorrhea. May be due to salpin-gitis, ovarian inflammation, pelvic cellulitis, septic cystitis, metritis, perforation of uterus, perityphiitis, appendicitis.

2. Give the etiology of apoplexy

Generally due to bursting of cerebral blood-vessel, most frequently the middle meningeal or some of its terminal branches, especially Charcot's artery; or the artery in the sylvian fissure, and sometimes the anterior cerebral artery is involved. The vessel is usually sclerotic, with miliary aneurisms, and on rupture the blood is poured out into the brain-substance, producing acute softening, which substance is later absorbed, and a cyst or a scar remains

3. Give the etiology and means of prevention of typhoid fever.

Typhoid fever is due to invasion of the small and large intestine by typhoid bacilli taken into the alimentary tract with food or water. The stools, urine, vomit and sputum of the typhoid patient should be thoroughly disinfected with an efficient agent; towels, napkins, bed-linen, and all clothing used by patients disinfected thoroughly before being laundered. Drinking water to be boiled All contamination from food by flies, etc, to be avoided.

What is the difference between a contagious and infectious

An infectious disease is one which is due to a specific and pathological microorganism which grows and multiplies in the body, elaborating a biologic poison. A contagious disease is one which is communicable through the air or atmosphere, and does not necessarily require contact with infected patients

5. What is the distinction between sewer-gas and sewer-air? What gives sewer-gas its peculiar odor?

Sewer-gas is a mixture of gases—CO, CO₂, NH₂, H₂S—generally resulting from decomposition of animal and vegetable substances. The characteristic odor is caused by the hydrogen sulphide and ammonium. Sewer-air is a mixture of sewer-gas and air after emanating from the sewer.

1. What are the indications for amputation in gangrene of

In dry gangrene, the general rule is to wait for a line of demarcation, and then amputate high up; but in senile gangrene, if the patient is exhausted or sepsis ensues, the amputation should be done at once, and high up, without waiting for the line of demarcation. In moist gangrene, after the forma-

tion of the line of demarcation, amputate high up. In trau matic gangrene, if spreading, amputate at once, and high up without waiting for a line of demarcation.

What are the signals of danger in general anesthesia?

Lividity or extreme pallor of the face, (2) feeble, irregular or intermittent pulse, (3) slow and shallow respiration, (4) dilatation of the pupils during deep narcosis.

Give the cause and treatment of painful cicatrix, adherent cicatrix, contracted cicatrix, and exuberant cicatrix.

Painful cicatrix is caused by the pressure of a contracting cicatrix upon the cut end of a nerve in the scar of an amputation-stump. In the former case the painful part should be excised; in the latter, the stump must be opened and the end

excised; in the latter, the stump must be opened and the end of the affected nerve removed.

Adherent cicatrix is caused by simultaneous injury (such as burns or scalds) to contiguous and approximated parts, such as the fingers or the pinna and the side of the head. A plastic operation is indicated.

operation is indicated.

Contracted cicatrix is most apt to occur in the flexure of a joint; a serious burn of the hand may cause flexion-contracture of the fingers. The treatment is to divide the cicatrix, dissect out the scar, and follow with skin grafting.

Exuberant cicatrix consists of a hyperplasia of scar-tissue. It is most often found in tuberculous patients, and is of unknown etiology. Excision is useless, as it is very apt to recur. Sometimes it disappears spontaneously.

4. Mention the most common sites of epitheliomata.

On the skin, mucous membranes, or at the junction of skin and mucous surfaces; lip, ala of nose, glans penis, cervix uteri, eyelid. The cylindrical-celled epithelioma is more likely to occur in the stomach, the rectum, and uterus.

5. Give classification of asphyxia.

Livida, blue: pallida, pale

6 Classify aneurism. What is its predisposing and exciting causes and the usual locations?

An aneurism is a sac formed by the walls of an artery and filled with blood. The predisposing causes are: arteriosclerosis, violent muscular exertion, straining, increased arterial tension, sudden emotion. The aorta is most commonly affected, especially the transverse aorta. Aneurisms are classified into circoid, sacculated, dissecting, splindle-form.

7. Give the principal methods of abdominal drainage with which you are familiar, also what method you consider best.

Gauze, rubber tubing, glass tubing, strands of gut, horsehair or silk. For blood and serum, capillary drainage along a strip of gauze is considered best. For pus, the tubes are considered better. Surgeons have different methods preferred but most surgeons prefer the vaginal if it is a pelvic disorder, otherwise the lowest point and gauze drain.

8. What important tissues may be wounded accidentally during an operation for femoral hernia?

The obturator artery, if abnormal. The deep epigastric artery. The spermatic cord, in the male, the round ligament in the female. The round ligament in the female is not of so much surgical importance, but if the spermatic cord is cut the vas deferens and spermatic artery are also severed. (The iliohypogastric nerve may be severed. The femoral artery, vein, and anterior crural nerve are of greatest importance.

9. Name and describe four forms of talipes

Talipes varus, in which the inner edge of the foot is drawn up, the anterior two-thirds twisted inwards, and outer edge rests

the anterior two-thirds twisted inwards, and outer edge rests on the ground.

Talipes valgus, in which the outer edge of the foot is drawn upwards, and the inner side of the foot and ankle rest on the ground. This condition is the opposite of talipes varus.

Talipes equinus, in which the heel is raised and cannot be brought to the ground. Patient walks on his toes and distal ends of the metatarsal bones.

Talipes calcareous, in which the toes are raised, heel is depressed, patient walks on his heel, toes cannot be brought to the ground. There are many variations of these deformities.

10. Give briefly Cohnheim's theory as to the origin of tumors.

Cohnheim's theory, that of embryonic remains, was that, owing to some slight developmental errors, small portions of embryonic tissue become misplaced and surfounded by cells belonging to a different blastodermic layer. If hese misplaced cells lie dormant but still alive. Later, traumatism or some other form of irritation acts as a stimulus and starts them proliferate, and the result is a tumor.

JUST AMONG FRIENDS

A Department of Good Medicine and Good Cheer for the Wayfaring Doctor

Conducted by GEORGE F. BUTLER, A. M., M. D.

EDITORIAL INTRODUCTION.—Last month we brought to a close the "CLINICAL MEDICINE POST-GRADUATE SCHOOL OF THERAPEUTICS," which has been running in these pages for several years. The ground which we originally planned to cover has been nearly all gone over, and hundreds have written us that they have enjoyed and been benefited by the practical studies in therapy which have been presented. The completion of this work leaves the Director of the Post-Graduate course, Dr. Butler, free to undertake something else, which, we trust, will be of equal interest to our friends of the "family." This is the Department, "Just Among Friends," the first installment of which is now presented. He will write this himself, but he hopes that any who read it will feel free to write him, either in criticism or praise. Some of these contributed comments will doubtless be printed in this or other departments. With the hope that you will enjoy "Just Among Friends," as they have enjoyed this, the first installment, the editors present this Department to the readers of CLINICAL MEDICINE.

BOUT twenty-five years ago I assisted in the organization of a "Therapeutic Club," limited to twenty doctors, in my neighborhood. We met informally, as we still meet, once a month, at each others' homes, and, sitting around the table in the evening after office hours and the strenuous labor of the day, we drank coffee, Apollinaris, and malted milk, partook of some simple food and talked over in a perfectly informal way the treatment of disease, gave our experiences during the month and then, before parting for the night devoted more or less time to the discussion of subjects entirely foreign to medicine. Sometimes we had music, sometimes readings, for some of our members knew something besides medicine, were versatile and talented, possessing more than ordinary ability in music, art, literature, etc. But we never played cards. And the versatile ones were among our best doctors, too!

In this day and age a doctor should be broadly educated, liberal minded, skilled and interested in matters outside of his own sphere of work. Not only in the treatment of nervous and mental diseases, but in the treatment of many other diseases, there is the question of the patient's mental

background, the unconscious standpoint that our patient occupies, and with which so far as possible, our remarks and attitude should harmonize until we are able by degrees to change it. And to do this, the figures, the language, and arguments we use must fit in to some extent with the scenery of his thoughts, with the psychical plane on which he moves; in a word, our mental scenery should be large and capable of being readily shifted at will to suit the figures that move on the mental stage of our patient's minds.

We should not encourage the vulgar prejudices against subjects such as sociology, history, philosophy, poetry, etc., that have no apparent association with medical science—inquiries which constitute the charm of life, and exercise a powerful influence upon the intellectual progress of nations, the civilization of the world, and the character, happiness, and destiny of man.

In reviewing my medical life tonight, I feel that I derived more real benefit from the meetings of the old "Therapeutic Club" than from my attendance on all the Medical Societies I ever have belonged to.

These informal discussions of medicine, of literature, art, and music, of philosophy of natural science, sociologic questions,

and of life generally, broadened my mind, and, I firmly believe, helped me in my profession.

In taking charge of this department, I shall try to follow the plan followed for so many years in the "Therapeutic Club." I shall yield to my moods, writing to you just as the spirit moves, just as I would talk to you were we smoking our pipes and chatting together in the seclusion of our home, after the day's work was done. You, Doctor, know what comfort and satisfaction there is in sitting down for an evening's chat with a brother doctor, who has been your life-long friend, giving your experiences, your confidences—baring your soul if need be. Now that is what I am going to do in these columns, and we'll say a few words at first about some practical therapeutic points that I have learned by experience, matters that occur to me as I write.

One of the chief causes of diseases in my opinion, is the clogging of the avenues of the body by the wear and tear of the human machinery and the retention, mechanically or otherwise, of some material that should be cast off. The wear and tear of the human machinery furnishes a fit medium for the cultivation of different species of germ life. The longer it is allowed to clog the various avenues the more will these minute beings multiply and produce a still further clogging of the system. The more the system is clogged the more impure the blood current becomes, and the more the circulation is burdened with waste matter; the greater the efforts put forth by the vital force to control the general interests of the body, the more rapid will be the circulation and the higher the temperature. The process of cure is the opposite. Cleanse all the avenues, tone the organs into the performance of their various functions. As Abbott says, "Clean out, clean up and keep clean" and then "take up the slack." Of one thing there can be little doubt, and that is that there are some germs which produce disease but not without favorable existing conditions for propagation. Germs only interfere with those persons who are in the proper condition to receive them, or to place themselves in proper relation to become infected. Keep well by keeping all the emunctories free from waste matter. In this connection don't forget the laxative saline, calomel and podophyllin.

The majority of doctors find the treatment of chronic diseases a stumbling block in the way of reputation and financial success. The reason is that they follow a routine method or some fad, instead of going about their work systematically, picking out and applying correct principles, making a definite plan and adhering to it persistently. The three cardinal factors in the treatment of chronic diseases are: rest, fasting, and appropriate drug treatment. Of course these must be applied with judgment. Rest for instance does not mean that a man should drop his work, go home, pull off his shoes climb into bed and remain on his back indefinitely. He may need rest in bed or in a hammock with cool breezes playing about. He may need rest from whisky, heavy dinners, mental excitement, rest for the overworked stomach, the paralyzed bowels, rest for the nervous heart and strained nerves. The brain may become tired in a variety of ways. Lying down perfectly still and for very short intervals is a very good way to rest the heart, brain and nerves, and will pull one together in an astonishing way, and as a daily practice undoubtedly prolongs one's life.

In chronic diseases nutrition is abnormal, waste is not promptly and properly eliminated; it accumulates, the system does not reduce its products to their lowest terms, causing friction and making the work of elimination all the harder. It is a great mistake to add further to the difficulty by giving more and more food to patients in whom the process of nutrition stagnates. Food will not be transformed into nourishing red blood unless the system needs it and there is appetite for it. Fasting rests the heart, making its work easier; rests the stomach and bowels, enabling them to store up secretory and peristaltic power; lowers blood pressure, flushing the area of

elimination; increases the consumption of water, softens and relaxes the entire body so that the work of "cleaning up" can proceed with greater rapidity and the least expenditure of vital force. Fasting may be absolute for one day or for several days; it may be partial, from abstaining from one meal or two meals, or by using a very light diet. We should always avoid extremes and hobbies, making successful experience the sole judge of the value of our methods, and be prepared to discard them for others if unfavorable symptoms develop.

In regard to the choice of drugs, eliminants such as I have mentioned, and sometimes alteratives are indicated in all chronic diseases, and the preparations used must be reliable. Bad drugs and a want of perseverance in their use are responsible for many failures in treatment. You must have good medicines and make the patient understand he will have to take them faithfully and for a long time in order to get well. The alternation of remedies is important in the treatment of chronic diseases. Any one drug, no matter how good a remedy it is, will wear out. It is a good plan to alternate the eliminant and the alterative, the one increasing nutrition and therefore waste, the other increasing the system's ability to dispose of this waste. Hence renovation and reconstruction go hand in hand.

Often distressing or excessive palpitation of the heart can be arrested by bending double, the head down and hands hanging so as to produce a temporary congestion of the upper portion of the body. In nearly every instance of nervous anemic palpitation the heart immediately resumes its normal function by this exercise. Do not forget, however, in palpitation of the heart to examine the urine and see that proper elimination is going on; and by all means remember that cactin is of value in functional derangements of the heart.

Hot physiological salt solution is one of the best applications to ulcers of the leg. Hot salt solution has a physiologic effect on the tissues, exciting phagocytosis and at, say, 58° C. is fatal to some bacteria, though not to their spores. The ulcer is best irrigated with a hot solution for a quarter of an hour and a sterilized dressing (gauze or cotton-wool) and a bandage is then applied. This is done daily until the ulcer cleans, then as often as necessary. Healing proceeds rapidly and this is especially suitable for patients who cannot afford the time to lie in bed. But don't forget the internal treatment—keeping the bowels open and the system clean.

How much trouble doctors have with their cases of dysmenorrhea! Preparations of viburnum and helonias, as well as gin and other "remedies," often fail to relieve many of these cases. When you get a case of dysmenorrhea which cannot be relieved by the employment of all rational means, apply a 4-percent solution of cocaine to the mucous membrane of the nose and notice how quickly your patient will be relieved.

Here is another therapeutic trick, this time for incontinence of urine in women, dependent upon relaxation of the sphincter urethræ? Massage! This is applied by introducing into the urethra a medium-sized metallic urethral sound and rapidly but gently stretching the urethra by a series of rotary movements. This should be done for a minute or two each day. A few weeks of this treatment will often accomplish the desired results.

One of the best treatments for delirium tremens is lavage of the stomach. After a tepid bath of short duration and a simple purgative enema, wash out the stomach with lime water diluted with ordinary water or a solution of sodium bicarbonate. Continue this, washing until the fluid is returned from the stomach quite limpid. Put the patient to bed and give 1-67 grain of strychnine arsenate or strychnine nitrate, with 1-12 grain of morphine. Sleep is soon established, on waking from which the phenomena of delirium are usually gone.

What do you say to dropping the subject of medicine for a bit? Don't you ever get tired of the ceaseless medical grind of complaining, peevish, sick people and of medical talk? Well, I do. I sometimes feel I should like to go back to protoplasm. Tonight I wish I were a barnacle on a South Sea Island rock where the full Pacific tides could wash over me, and the southern suns steep me in infinite calms of laziness. Give me the rest that lurks in the autumn fields and shadow-haunted woods, and you may take my place at the hospital and the college. Doctor, a September day with God, listening to the musical murmurs of the forest will strengthen you for many a day's struggle in town!

If I were a bird I'd fly to some forest so vast and deep that even the flutter of a falling leaf could be heard for miles in the still air, and there I'd build me a nest of silence, drink sunshine for wine, and never grow old. And when death came I would have no funeral, nor crepe, nor mourning friends, nor outdoor parade of hearse and followers, but I'd simply die and be done with it, as "morning changes into noon."

Don't you feel like resting a bit, like calling out to the mad procession to stop? For my part I would like to slow up for a while. I see doctors all about me growing gray. I see the babies I brought into the world wheeling perambulators for their own little "bald-headed tyrants," and it strikes me that I am getting along past the middle mile post. The calendars don't seem to be so reliable as they used to be. The seasons are constant, but they are in a greater hurry. Spring used to take off her things and sit awhile: now she only stops to throw a bunch of lilacs in at the window and flits away. Summer and autumn used to make themselves at home and linger long and pleasantly, but of late years the former weaves a garland which is hardly finished before the latter breathes upon it and it drops to pieces. As for winter, he barely takes time to show us his ermine and laces before he is summoned back to the land of nowhere.

A few words spoken lightly by the tongue of slander, a significant expression of the eyes, a cruel shrug of the shoulders, with a pursing of the lips, and then friendly hands grow cold, the accustomed smile is replaced by a sneer, and one stands alone and aloof with a dazed feeling of wonder at the vague, intangible something that has caused it all.

So let us say no unkind word about another doctor or another man, nor worry about our detractors. There is one who understands us and knows us as we are.

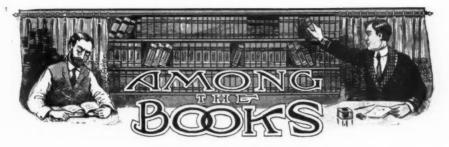
"Our censors guard us roundabout
And hedge us with their dusty creeds;
They cry us wrong in hope or doubt
And howl like mad dogs at our deeds.
They wail our knotted skein of life,
And flout us for our clumsy hands,
Because with tangles it is rife—
But all the time God iunderstands.

"Our censors measure step and stride With mathematic rod and rule, And when we wander to one side Straightway they cry aloud, 'Thou fool!' And book and bell and candle bring To curse the one who halting stands, But ah! the footsteps wandering—He understands—He understands.

"Our censors weigh our every word
And sift its sound for sign of sin
And whispered dreams that are unheard
Against the screen of fate they pin;
With happy smile they search our brain
To bind our thoughts with brazen bands,
And hope shall struggle not in vain,
And all the time God understands.

"He understands our little fears,
Our little doubts and little woes,
And in the shadows of the years
He sees the soul. He knows—He knows;
He scans us, not as censors do—
To mark the blindly searching hands—
But all our good he brings to view,
He understands—He understands."

Let us as doctors preach the gospel of cheerfulness, self-confidence, optimism, and cultivate comradeship—fraternalism. When you come to look life fairly and squarely in the face what does it all amount to as regards oneself: food, clothing, the necessities for the continuance of life, that is about all any of us gets. We are all traveling the same weary road, footsore, tired, some more heavily burdened than others, all going down the hill of life, with steady or unsteady steps, fast or slow, and at the foot of the declivity there is waiting for us, all alike, the open grave, in which we must calmly take our place. We are here today, at the foot of the hill tomorrow and then the little mound, and the next day we rot-and how soon forgotten.



NEW EDITION OF THE W-A "ALKA-LOIDAL THERAPEUTICS"

A Text-Book of Alkaloidal Therapeutics. Third edition. Revised and Enlarged. By W. F. Waugh, M. D., and W. C. Abbott, M. D. Chicago: The Abbott Press. Octavo, 765 pages. Price, cloth, \$5.00 net.

Since the first edition of this work appeared the progress in therapeutics has been great. In every department there has been good work done, with corresponding results. At the outset, the authors of this volume took the ground that the therapeutics of the active principles did not constitute a complete system or embrace the whole field. Being but a part, it did not justify the creation of a separate school or sect in medicine, but could only continue to live and develop so long as it remained attached to the parent stem. This has been verified by the gradual attenuation of the dosimetric movement in Europe. The journals established in various countries have died out, the central one in Paris has shrunk: the movement has spent itself. All there was to say anent the alkaloids has been said, over and over, and no new developments have been made to sustain the interest. Burggraeve and his strong supporters are dead, and their successors do little except to go over the tailings and extract a few grains of pure metal that escaped their predecessors.

Here in America matters are different. Those who first recognized the great importance of the alkaloids also saw that these agents formed only a part of therapeutics, and that the interests of the patient must suffer from any attempt to make a part serve for the whole and to shut out other useful expedients. More-

over, there can be no normal, healthy development of therapeutics except as a part of the general professional advance.

Our judgment has been vindicated by the results. The use of the active principles and pure chemicals, given singly, with definite purpose, or combined with distinct intention, has progressed in the body of the profession until it is becoming a habit. Men are rapidly learning the advantages of applying therapeutic certainties to meet distinctly comprehended conditions. The old, set shotgun prescription is becoming obsolete. Nearly half the physicians of America are in touch with the "alkaloidal group," and the number increases apace.

The present volume is nearly double the size of its predecessor. Many books, innumerable journals, monographs, and other publications have been searched, to bring to light every smallest bit of information that seemed likely to be of use to the doctor in caring for his patient. A wealth of clinical reports has been uncovered, in French, Italian, Spanish, and in other journals, to all intents lost to all but their immediate readers; and these have been collected, compared, and consolidated into compact and convenient forms for reference. The labor involved has been great, but it has been indeed a labor of love, and the pleasure of presenting this valuable material to their colleagues fully compensated the authors for "long days of labor, and nights devoid of ease.

Comparing this with the first edition, we are surprised that there should be so few statements in the latter which time has proved erroneous. The changes are almost all in the addition of new material. But too many of the gaps then revealed in our knowledge of the action of drugs remain

still unfilled. Too many matters then involved in controversy are still in the same uncertain state. We sorely need to have important points settled, points that should have been settled long ago, and might have been, had our friends but done their share. Most of these can only be decided by experience—it is the clinician, not the laboratory worker, whose aid we need.

The authors of this book come in touch with 60,000 physicians, embracing the majority of the active general practitioners of America. Were each of them to make careful observations as to the action of remedies, record them, and report to us, we could settle any moot point in therapeutics by this gigantic collective investigation. The trouble is, they don't know just how to go about it. Say, "scientific observation," and one begins straightway to think of the cost of sphygmographs, manometers, x-ray outfits, and that sort of thing. But, see here, we want to know whether people saturated with calx sulphurata will be attacked by mosquitoes and infected with malaria. Can't you try it? Won't you? Just give anybodyyourself-five grains of the drug daily and note results. You don't need a manometer to tell whether a mosquito bites you.

We don't want you to do it all, but to do what you conveniently can. But if each of you does that, we shall give this old world such a hunch as will make her axles squeak.

"LITORA ALIENA"

Litora Aliena. W. M. Leonard, publisher, Boston. Octavo, 78 pages. Price 50 cents.

I doubt if anybody enjoys his vacation as does the doctor. And for that very reason, when one of our guild does take the trouble to put into type the impressions derived from his pilgrimage in foreign lands, we appreciate his escape from the grind and his privilege in throwing off the cares of the profession as nobody else can do. That is the reason, probably, that the series of letters which recently appeared in *The Boston Medical and Surgical Journal* proved so charming. We are

glad that they have been republished in their present form, and commend them to our readers as well repaying the small price asked for them.

It is instructive, and amusing perhaps, to note how in his early days the author could not forget he was a doctor, hence devoted himself to clinics and hospitals, but by and by the smell of the drug-room seems to have been shaken off, and in the latter part he devoted himself more exclusively to the pleasure of sight-seeing and of conjuring among their once familiar localities, the ancient days of King Arthur and his table round; and of the other historic events which merry England has witnessed.

HEINEMANN'S "BACTERIOLOGY"

A Laboratory Guide in Bacteriology. For the Use of Students, Teachers and Practitioners. Second Edition. By Paul G. Heinemann, Ph.D. Chicago: The University of Chicago Press. 1911. Price, postpaid, \$1.59.

This is an ideal volume in every respect for the laboratory worker in bacteriology. It is concise, yet complete in every detail, and thoroughly modern. It is a credit to its author, who, however, needs no introduction to laboratory workers in bacteriology, as his frequent contributions to this important branch of biological science are of rare value. All the modern and improved methods are described in a clear, finished manner. The literary style also is such as to make this ordinarily dry subject most interesting reading.

This book is recommended, not only to medical students who, owing to the multitude of other subjects to be mastered, desire to acquire a knowledge of laboratory methods in bacteriology in the shortest possible time, but also to the general practitioner who wishes to be up-to-date on modern laboratory methods in bacteriology or desires to acquire a knowledge of new methods. Of the many similar excellent works on the market, we know of none that so thoroughly and completely covers the subject-matter in so concise and clear a manner and in such a way as to be

readily understood even by those having no infimate knowledge of the subject.

J. F. BIEHN.

"AMERICAN PRACTICE OF SURGERY"

American practice of Surgery. A Complete System of the Science and Art of Surgery, by Representative Surgeons of the United States and Canada. Editors: Joseph E. Bryant, M. D., LL.D., and Albert H. Buck, M. D. Complete in 8 volumes. Profusely Illustrated. Volume 8. New York: Wm. Wood & Co. 1911. Price, cloth, \$7.00.

The volume before us, which completes this monumental work on surgery, deals with the regional surgery of the thorax, exclusive of heart and esophagus, of the spleen, kidneys, pancreas, the hepatic organs, urinary and genital organs. It contains several chapters on the medicolegal aspect of surgery, on the relation of hospitals to surgery, on military surgery, naval surgery, railroad surgery, and concludes with a complete index of the entire work.

This system, the bringing out of which has required five years, is sufficiently well known so that it does not demand, at this time, a detailed discussion, and the fortunate subscribers, we are sure, will be glad to have the complete work finally on their shelves. Any physician who is interested in surgery will find in these eight magnificent volumes an enormous amount of information presented by the foremost American surgeons and teachers.

WITTHAUS AND BECKER'S "MEDICAL JURISPRUDENCE AND TOXICOLOGY

Medical Jurisprudence, Forensic Medicine and Toxicology. By R. A. Witthaus, A. M., M. D., and Tracy C. Becker, A. B., LL.B. Second Edition. Volume IV. New York: Wm. Wood & Co. 1911. The price of this volume, sold separately, is \$7.00, in cloth; \$8.00, in brown sheep. The price of the set of four volumes is \$24.00, in cloth; \$28.00, in sheep.

The last volume of this authoritative work on medical jurisprudence covers the very interesting subject of toxicology, written by Dr. Witthaus, who has devoted the greater part of his life to the study of chemistry and poisons, and to the art of the detection of the latter, so that he is probably better qualified than any one else to speak authoritatively on this subject. The various poisons are described in great detail, not only as to their action upon the organism, but the tests for their detection are also given.

The style of the book is remarkably interesting and the subject, though somewhat dry in itself, gains by being treated historically and by being illustrated with numerous references and cases in point, most of the *causes célèbres* being included in the description of the various poisons.

NEUBURGER'S "HISTORY OF MEDICINE"

History of Medicine. By Dr. Max Neuburger. Translated by Ernest Playfair, M. B., M. R. C. P. In two volumes. Oxford Medical Publications. New York: Oxford University Press. 1910. Price \$9.00.

The Bookworm had the privilege, some time ago, of examining and using the beautiful encyclopedic work on the history of medicine, designed by the late Professor Puschmann and carried out by Dr. Neuburger, Professor of Medical History in the Imperial University of Vienna, in association with Professor Pagel of Berlin. Because of his knowledge of that large work, the reviewer was greatly pleased to learn of a smaller work by Neuburger, and its translation into English is a source of gratification.

The first volume, now before the writer, contains an introduction by Dr. Osler, whose views on the importance of historical study are well known. The text deals with the history of the medicine of the East and of that of Classic Antiquity and the Middle Ages. We wish to assure our readers, from our personal experience, that the study of medical history is by no means only a hobby and a pastime, but that it enables us to appreciate and understand the better the acquirements of modern

researches. The present work is an unusually meritorious one and should be read and studied widely.

Like all the "Oxford" medical publications, this book is beautifully gotten up. The type is particularly clear, owing to the use of a dull-white paper, the latter of very light weight, so that the large volume is easily handled.

EAGER'S "COURTSHIP UNDER CONTRACT"

Courtship Under Contract; The Science of Selection. A Tale of Woman's Emancipation. By James Henry Lovell Eager. New York: The Health-Culture Company. 1910. Duodecimo, pp. 450. Price, cloth, \$1.20 net.

That there is "something rotten" in the manner in which the marriage relation is played fast and loose with in our wonderful advance of civilization there can be no gainsaying. More, the "marrying in haste and repenting at leisure" is as old as humanity. But we admit that in our present socioeconomic conditions, the evils of ill-considered marriage and of reckless divorce are painfully accentuated. Yet, not one of the remedies proposed, whether they may lean to free-love or trial-marriage or what not, has offered an acceptable solution, because they all were obnoxious to our sense of the fitness of things.

In the present novel, the author proposes a further remedy in the form of courtship under contract. The heroine enters into a contract with her wooer, with the full approval of her family, according to which they are to live together as husband and wife, in all except the sexual relations, for a space of six months. The woman is to remain full mistress of her person and to occupy a separate bedroom, but otherwise the companionship is as close as possible. This contract is published under the marriage notices and arouses the greatest interest. After several months the heroine makes use of the right granted to both parties in the contract and terminates it, because she finds that she does not love her fiancé sufficiently to spend her life with him.

It is fortunate for the young lady that both she and her foster parents occupy an assured position and enjoy a high reputation for probity. Otherwise—and in actual life almost certainly—she would have been ostracized, with our usual want of charity.

While the problem dealt with in the story and the solution offered is interesting, we doubt whether it would be practicable. Our young ladies are not such cool-headed and fish-blooded prigs as Mona, the heroine, appears to be, and few young men could probably withstand the temptation of constant close companionship without making desperate attempts to obtain full possession of their fiancées.

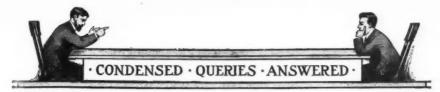
The book is written in an earnest and persuasive style, which unfortunately could not remain free from preaching. It is somewhat disturbing to find a charming young lady of nineteen with the mentality of an old professor of social economy, but we realize the difficulties under which the author labored and will not criticize too sharply.

CORNER'S "MALE DISEASE"

Male Diseases in General Practice. An Introduction to Andrology. By Edred M. Corner, M. A., B. Sc. London: The Oxford University Press. 1910. Price 86.00.

The author insists upon the need of a science of the diseases of men, which might be designated as andrology, in correspondence with the analogous gynecology, because "men are, without doubt, carriers and transmitters, often unconsciously, of venereal infection into their own homes." The results of venereal disease in the male, therefore, would properly form an important part in the proposed science, which, like its counterpart gynecology, is an offspring of general surgery; with this difference, that gynecology has passed through the intermediate stage of obstetric surgery from which it has divorced itself.

The volume treats, as may be supposed, of the pathology and treatment of diseases of the male genital organs. Both congenital and acquired conditions are fully discussed.



PLEASE NOTE

While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.

ANSWERS TO QUERIES

Answer to Query 5714.—"Shock-Bath for Brachial Neuritis." The best thing I have used for acute neuritis is the shock-bath. One application relieves the pain better than morphine, and its continuous use cures, provided the cause of the neuritis does not continue to act.

The shock-bath consists in alternate applications of dry heat and cold. A hot flatiron and a lump of ice are all the apparatus necessary. The iron should be applied over a piece of dry flannel. After passing it up and down the course of the affected nerve two or three times, apply the ice to the bare skin in the same way, and wipe rapidly. Repeat the process for ten or fifteen minutes, according to the reaction. The treatment should be given from twice a day to twice a week, according to indications.

I do not recommend this procedure for rheumatism, neuralgia or myalgia, but in true neuritis it seems to be a specific. Probably it would not now be beneficial in the case related, except to relieve the "rain-pains." I would suggest pushing antirheumatic treatment (unless another cause is demonstrated), with application of hot air to the affected arm, hand and shoulder, followed by thorough petrissage of the same area, finishing with centripetal effleurage.

If the lost motion is due to false ankylosis, the remedy is passive Swedish movements. If it is due to paralysis, galvanism or the sinusoidal current to the supraspinatus and deltoid and to the muscles of the forearm.

Chas. F. Morrison.

Klamath Agency, Ore.

Answer To Query 5714. "Brachial Neuritis." Vibration for Brachial Neuritis. Brachial neuritis is one of the troubles I have been very much interested in, and one which I soon relieve with the vibrator and leucodescent light. From the description of the doctor's treatment, he has missed the vital point. He should use deep vibration at a point behind the collar-bone over the brachial plexus, every other day. That will cure both shoulder and arm, also hand pains as well. Generally the harder and firmer the pressure of the vibrator, the sooner the pains get well.

J. W. ARNOLD.

Columbus, Ind.

Answer to Query 5716, July number. -"Is Calomel Harmful?" I have a word to say to calomel kickers. I will first say I am an advocate of, and don't see how I could practise medicine without, it. In my thirty-one years of practice I have never seen a child under five years of age salivated or have a sore mouth from calomel; have never seen salivation during any age that could not be cured up in three days. When I commenced practice 10 grains was the average dose, and now the average dose is about 1-100th part of that. Twentyfive years or more ago I was also engaged in the drug business at the county seat of Carter County, Kentucky. In that town lived an old man about 65 years of age. He came to my store often to purchase calomel, and in large quantities. I asked him one day how he made use of so much calomel. His reply was, "I take it myself." I next asked, "How much do you take at a

dose?" His reply was, "About a teaspoon level full." I again asked, "How often do you take such doses?" His reply was, "Once a week, and sometimes twice." I could not believe him, so I asked his wife about it. She informed me that he had not misrepresented. I explained to the old gentleman that 10 grains would do him as much good as a teaspoonful, but he was not ready for the explanation and kept up his regular dose as long as I lived in that town, about five years.

Now, I suppose some of these calomel knockers will say, "That fellow is a kin to Ananias." However, Uncle Sam has honored me with three government positions in my time and I am not a Republican either. Furthermore, I have been in the employ of the C. & O. Railway as a surgeon for fifteen years. I am only stating these facts to show you that I am not an amateur in the medical profession.

A. F. HILL.

Chattanooga, Tenn.

QUERIES

QUERY 5727.—"Mammary Fistula." J. O. W., California, recently delivered a woman, aged 24, of a boy baby, after a tedious labor (completed with forceps) of fifteen hours. No accident or bad aftereffect occurred. All went well for about ten days, when a large lump appeared in the axillary border and right lower segment of the left breast; this had been preceded by cracked nipples, which seriously interfered with nursing. After exhausting all usual remedies to dissipate the swelling, about the twentieth day after delivery a large abscess was evacuated by incision just below and to the right of the nipple. A quantity of purulent fluid mingled with what appeared to be soured milk and detritus of areolar tissue was discharged, whereupon the fever and all pain disappeared. Later, the right breast took on the same conditions, though not so extensively, and a small superficial opening through the skin at the lower border gave immediate relief. During all this time the babe has been nursed at the right breast, besides receiving artificial feeding.

A "strange feature is the great quantity of what certainly is decomposed milk which continues to flow steadily from the wound in the left breast", yet no secretion manifests itself at the nipple in this breast. The doctor asks: "Can it be that this is truly milk, flowing from ruptured lacteal ducts? If so, how can I remedy the trouble? The wound seems to be healing nicely from the bottom, a drain being kept in it for five days. There was little or no blood

drawn by the incision (none since), which was only through the skin and areolar tissue. Should I continue to permit the nursing of the child at the breast or dry up both breasts?"

We regret to say that it is impossible for you to do anything further than you are now doing, that is, heal up the wound from the bottom. We gather (perhaps erroneously) that the incision was made in the wrong direction and that the lacteal ducts were severed. As you, of course, know, in mammary operations, the incisions should radiate from the nipple. Very great care must be taken when the deeper tissues are reached.

We question the advisability of drying up the milk supply. Keep the parts scrupulously clean; give nuclein and echinacea internally, and apply to the affected breast compresses wrung out of a dilution of echinacea and thuja. Gentle elastic pressure should be maintained.

We wish we were able to aid you more effectively, doctor, but a most unfortunate condition obtains and, as already pointed out, the wisest thing to do is to secure granulation. It is possible that this breast will never again functionate normally. Should the woman bear another child, prepare the breasts carefully before delivery.

QUERY 5728.—"Enuresis Diurna. Menorrhagia." V. S. E., Canada, is treating two cases that have "gone the rounds" and he would like assistance.

1. Patient, a widow and mother, age 57, of nervous temperament and sedentary habits, weighs about 160 pounds and is in fair general health. For the last twenty-odd years she has been troubled with enuresis when walking on a level surface; rarely troubled when going up or down hill, and never when sitting or in bed. Sometimes it occurs when coughing or sneezing, but which is rarely the case. The condition is worse when the rectum is full or when her nerves are unbalanced from excitement. Occasionally she is better for a few days, without any observable reason.

The urine contains oxalates. Uric-acid crystals and indican were found, as well as a few pus-cells. The reaction is generally slightly acid. The specific gravity ranged from 1026 to 1013-quantity about 48 ounces. No sugar or albumin were found. No calculi could be discovered. The sphincter ani is rather tight. The woman has been examined and treated by doctors galore, without benefit, and in several cases was made worse. Her tissues seem flabby and she is pale. The doctor is now giving her Blaud's pill compound, and strychnine. Has kept bowels clear and clean, also, with pilocarpine and minute doses of veratrine, together with dieting and plenty of water, has gotten the urine in fairly good condition. Atropine, thuja, and cantharidin have been prescribed till the patient became sick of taking pills. The trouble began about four years after childbirth. There is a slight tear in the perineum, but not sufficient to be regarded as the cause of this trouble.

Now, Doctor, before you can cure enuresis you will have to discover the causative disorder. We note that the woman is of a nervous temperament, autotoxemic, and anemic. We, therefore, first of all should dilate the sphincter ani, then secure thorough elimination and as nearly normal body-chemistry as is possible. The fact that the discharge of urine occurs when the woman is walking upon the level leads us to suspect a vesical polypus or of other body which acts as a "ball-valve" when the body is erect. Weakness of the vesical sphincter is of course a primary cause.

Insist upon plenty of outdoor exercise; also a cool salt sponge-bath two or three times a week. Cantharidin is not likely to prove efficacious in this case. Thuja with hydrastin, strychnine nitrate and delphinine are more likely to prove beneficial. We should also give nuclein in rather large doses, preferably with the phosphates of lime, soda and magnesia, three times a day.

Have you catheterized this woman? See if there is any hyperesthesia or abnormality of the urethra; note also position of uterus. The cause of the trouble may lie there. We should be inclined to irrigate the bladder three or four times with a 2-percent ichthyol solution, or you may use borated calendula. Have the perineal tear repaired even it it be small. Order an abdominal supporter and see that it fits snugly and "lifts upward."

2. "A maiden of twenty-two has membranous dysmenorrhea, but is not willing to undergo an operation. The doctor writes:

"I have been trying sanguinarine, gr. 2-67 four times a day; during intervals, Buckley's formula; gelseminin and cicutine hydrobromide during menstrual week; all with but little success. She expects to marry within a few months. Would child-bearing help her, or would she probably be sterile? How would the application of iodine to the endometrium answer? She is fleshy, of nervous temperament and sedentary in her habits. Her general health is good. Can you advise anything except curettement?"

In membranous endometritis we should urge a thorough curettage, this condition rarely yielding to less vigorous treatment. You can, of course, dilate the cervix and apply to the endometrium thymol iodide or iodine and ichthyol in glycerin; but curative results can hardly be expected in a case of this kind. An oophoritis may coexist. A saturated solution of iodine in glycerin has given the writer good results; it should be applied on a cotton-wrapped applicator; strips of gauze saturated with carbenzol are then packed into the fornices and the vagina slightly filled with plain (sterile) gauze.

Internally, calx iodata, ergotin, hamamelin, and hydrastin are perhaps most useful; chromium sulphate also may be tried. However, such positive results follow thorough curettement that it seems a pity to waste time on treatment which is apt to prove unavailing.

QUERY 5729.—"Cystitis Following Prostatectomy." C. W. H., Oklahoma, has a patient, aged 67, who had his prostate and also a vesical calculus removed at the same operation. He now suffers constantly with a burning sensation in the penis. which can be relieved only by morphine. A chronic cystitis is present, which clears up almost completely by using the general diuretic formula or arbutin. The amount of urine voided is over 30 ounces in the twenty-four hours; specific gravity, 1020; color, straw-yellow. He is continuously passing calculi that are very hard and rough. There seems to be constant spasm in the deep urethra or neck of bladder, so that it is impossible to irrigate the bladder without an anesthetic, which is not desirable on account of an organic heart

At present glycerin is being used to prevent formation of stones, according to the ideas of the Germans. The man sometimes passes six or eight at a time of about the size of a pea.

Were we in your place, Doctor, we should substitute the combination of hyoscine, morphine and cactin for the plain morphine, using just enough to control the spasm and pain. Do not tell your patient the nature of the medicine.

Of what do the calculi consist? Send some of the concretions and a 4-ounce specimen of urine to the laboratory. Upon receipt of the pathologist's report, we will outline a treatment which will, we think, prove effective.

Formin with lithium or ammonium benzoate, according to acidity or alkalinity of the urine, with laxative salines and arbutin, would seem to be indicated. As a cystitis exists, we presume the urine is alkaline. In that case ammonium benzoate should be given in 5-grain doses, with formin, every three hours. Large quanti-

ties of barley water, made as follows, should also be consumed: Soak in water two table-spoonfuls of barley for a few hours or over night. Throw away the water. Then pour on one quart of fresh water and boil continuously for six hours, keeping the quantity up to a quart by adding more water. Strain through coarse, previously boiled, muslin, and preserve in the ice-chest or other cool place.

The bladder should be washed out once or twice a week with a 2-percent ichthyol or 1:1000 antinosin solution. Anodyne suppositories containing hyoscyamine and carbenzol (or ichthyol) will prove useful.

QUERY 5730.—"Prevention of Adhesion." W. C. E., Minnesota, has a patient, 15 years old, who has just undergone appendectomy; there were many adhesions. The doctor asks: "What medicine, internally or externally, would you recommend to prevent their return? Would you advise the use of a vibrator? The patient is naturally strong and his habits are good."

As we glean, adhesions existent before the appendectomy were broken up at the time of the operation. Provided the operation was thorough and normal (nonseptic) conditions obtained thereafter, adhesions are not very apt to form again. Gentle massage or vibration over the affected area and the exhibition of calx iodata or arsenic iodide suggest themselves. If adhesions do form, we should feel disposed to give chromium sulphate internally and a course of thiosinamin hypodermically, provided the abdominal scar is small, so that, if softened, rupture is not to be feared. Maintain normal conditions.

QUERY 5731.—"Chronic Urethritis. Cellulitis." E. B. D., Ohio, writes: "What can I do for chronic gonorrhea, to stop the discharge, the socalled 'morning drop?' Also what can I do to reduce a mass of inflamed cellular tissue posterior to the womb? Is there any depleting remedy that I can use by the vaginal route? The woman seems well every other way. There is a mass of inflamed tissue in the hollow of the sacrum—just enough to keep up a little fever all the time."

We have mailed you literature outlining the modern treatment of urethritis, specific and nonspecific. This subject is too extensive to be dealt with satisfactorily in the limited space at our disposal here. You might advantageously read Query 5718, in the late July number. Then carefully examine your patient, and if you care to do so, report the exact conditions which obtain, sending to our pathologist at the same time a smear of the urethral discharge. We shall then be in a position to prescribe intelligently.

Any one of several pathologic conditions may cause a persistent gleet-and it is essential to recognize the basal lesion before instituting treatment. For this reason, we hesitate to offer advice in the case of the woman. A salpingitis may have existed and the tube-or even an ovarybe embedded in a mass of adhesions in the cul-de-sac. As there is a persistent temperature, you probably have to deal with a collection of pus, and drainage in such a case would be essential. What is the history, the present condition of the uterus and adnexa, and is there any venereal taint? Examine through vagina and rectum, and describe the pelvic conditions. How long has the condition obtained? What remedial procedures have been tried?

You cannot go far wrong if you use, temporarily, copious antiseptic douches: one teaspoonful of a standard vaginal antiseptic powder to the quart of hot water. Thoroughly dry and cleanse the fornices with pledgets of cotton and then pack lightly with strips of gauze saturated with thymol iodide dissolved in oil. Iodine and glycerin, or glycerin, ichtyhol and iodine may also be used. Application should be made every other day. Wash out the bowel with warm solution of epsom salt. Maintain intestinal activity and cleanliness. Give echinacea, calcium sulphide, and nuclein in rather large doses.

QUERY 5732.—"The Frequent-Dose Bugaboo Appears Again." E. G. R., Missouri, has one objection to the alkaloids, namely, the method of administration. "We are advised," he says, "to give one or two tablets every fifteen or thirty minutes to effect. How are we going to manage that in the country, where we are from one to twenty miles from our patients and when we have five or six calls like this to make every day. We cannot stay with one patient that long. It is, examine your patient, issue your medicine, give directions, and hurry on to the next patient. If one could formulate dosage so that the medicine could be given every two or three hours, it would be all right and I think many more physicians would use the alkaloids. patients also object to taking medicine so often. Why not make the doses larger, give farther apart, and still get the desired effect, as we do with quinine, morphine, and strychnine?"

Do not allow frequency of dosage to become a bugaboo. As a matter of fact, only a few of the more active remedies are given at frequent intervals, and then only in acute conditions, that is, where it is desirable to secure action as speedily as possible. In treating most diseases, the active principles and synergistic remedies are given three or four times daily, or, in some cases, half-hourly or hourly for four to six doses.

For instance, you are treating a child with measles or any one of the acute infectious diseases. You would order 1-6 to 1-10 grain of calomel with perhaps 1-6 grain of podophyllin half-hourly for four doses in the evening, with a saline laxative the next morning. It is just possible that you would wish to give the mercurial combination at once and follow the last dose with the saline. It is a very simple matter for any adult to attend to such medication, and the results surpass those obtainable by any other method.

The child's temperature is high, and it is desirable to reduce it. We will say the child is 12 years old. You will dissolve 12 granules of aconitine in 24 teaspoonfuls of water, and order a teaspoonful half-hourly or hourly until the skin cools or until the child complains of tingling in the throat and of the tongue. In nine instances out of ten—especially if the bowels are cleaned out, and the body has been sponged with an epsom-salt solution, as it should be—the temperature will fall two to three degrees in four or

six hours. Then ordinary medication is continued, i. e., the indicated remedies are given every two, three or four hours, or one remedy every three hours and another every four, with perhaps, a night-dose of some laxative or a saline laxative in the morning. Many thousand country practicians use the alkaloids daily in this way and obtain results heretofore deemed "impossible". Surely this fact proves beyond question the ease of exhibition.

Moreover, the doctor using the active principles knows that he is administering definitely acting remedial agents. He practises precise therapeutic methods. He does not merely treat named diseases or exhibit compounds of unknown strength and action -some combination of drugs said by someone to be "a specific for" this or that disease. Each granule contains a definitely known quantity of a drug that exerts a positive action, and if the small dose is given at intervals, the desired effect must be obtained, provided the diagnosis and selection of remedies are correct. If the doctor has erred in either direction, the physiologic effect of the drug will be manifested before the remedial action. Thus the practician is warned of his error and can revise his medication. This last sentence applies particularly to the more potent alkaloids, for instance, aconitine, veratrine, atropine, gelseminine. If you have a file of CLINICAL MEDICINE, read Ouery 5558, in the issue for March, 1910.

We think we have demonstrated, doctor, that your conception of the socalled dosimetrist's method is erroneous. As a matter of fact, they do just what you think ought to be done, namely, give the effective dose every two or three hours. Now and again, it is true, a granule is ordered every fifteen to thirty minutes, but the conditions present in such cases are serious and the rapid medication is maintained only for a short time. No human being objects to watching the clock for an hour or two and giving medicine twice in the hour when some loved one is seriously ill, especially if by such medication remedial results can almost invariably be obtained.

The writer himself has practised in the country, and had as many as twelve or even

twenty patients under treatment the same day, and day after day, and has yet to experience any difficulty whatever in getting the active principles given in the proper manner. Adults who are not very seriously ill can readily "reach for" and swallow a granule on time, and even small and very sick children take the practically tasteless alkaloidal granules without protest.

QUERY 5733:—"Hematuria: Possible Vesical Lesion." H. M. B., Nebraska, forwards a specimen of urine and rather incomplete clinical data and asks for diagnosis and treatment. The patient, married woman, complains of pain in the abdomen and when passing urine, also of frequent micturition, blood being constantly present in the urine. The doctor wishes to know where the blood comes from, whether from kidney or bladder, and, in addition to a complete urinary analysis, wants urine to be examined for the tubercle bacillus.

The report of the pathologist shows absence of tubercle bacilli, alkaline reaction, presence of squamous epithelia, amorphous phosphates, triple phosphates, and a moderate amount of blood. It is impossible, from a simple examination of the urine, to say just where the blood comes from. Casts are absent. We are inclined to think that the lesion is in the bladder. In order to be certain upon this latter point, you might inject 10 to 20 grains of potassium iodide in solution into the bladder. Half an hour or an hour afterward, have the patient expectorate into a starch paste containing a little nitric acid. If there is a break in the bladder mucosa, the iodide will be absorbed and excreted in the saliva in from one-half to two hours. The nitric acid will cause the liberation of the iodine and the starch will assume a violet color. Bear in mind, doctor, that there is no absorption whatever from a normal, intact vesical mucosa; hence, no absorption of the iodide and consequent discoloration of the starch paste.

The patient may suffer from a tuberculous kidney. The negative finding in this case is of very little value. We suggest the inoculation of a guinea-pig. The time required for this test is six weeks. Or you may try the Von Pirquet reaction.